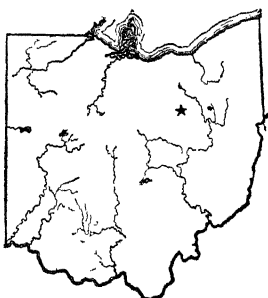


OHIO WEATHER FOR 1918

OHIO Agricultural Experiment Station

WOOSTER, OHIO, U. S. A., JUNE, 1919

BULLETIN 337



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CONTENTS

I. Introductory and general	649
II. Weather maps	650
III. Climatological data for Ohio.....	713
IV. Meteorological summary	714

(647)

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BULLETIN

OF THE

Ohio Agricultural Experiment Station

NUMBER 337

JUNE, 1919

OHIO WEATHER FOR 1918

W. H. ALEXANDER AND C. A. PATTON

INTRODUCTORY AND GENERAL

The year 1918 has the distinction of bringing to many stations in Ohio both the coldest and the hottest weather on record. The cold wave that overspread the State on January 11-12 and the hot wave on August 5-6 were unprecedented in severity. The former was but an incident in connection with the cold weather that set in on December 8, 1917, and continued with remarkable persistence up to and including February 5, 1918, while the latter came on with unusual suddenness and lasted for about 11 days. Thus we may say that January 12 was probably the coldest and August 6 the hottest day the State ever experienced, taking the State as a whole. The other portions of the year were quite mild and without distinctive weather characteristics of importance.

The maps and summary tables following are entirely self-explanatory and portray in considerable detail the chief weather features of each month and therefore of the year.

Mean temperatures, January, 1918



Fig. 1.—The average temperature for the State was 14.9°, ranging from a highest monthly mean of 22° at Marietta to a lowest of 10.8° at Paulding. The highest temperature was 49° at Marietta on the 6th and the lowest was —28° at Gambier on the 20th, giving a range of 77° for the State. The greatest daily range was 56° at Peebles on the 21st.

Temperature departures, January, 1918



Precipitation, January, 1918

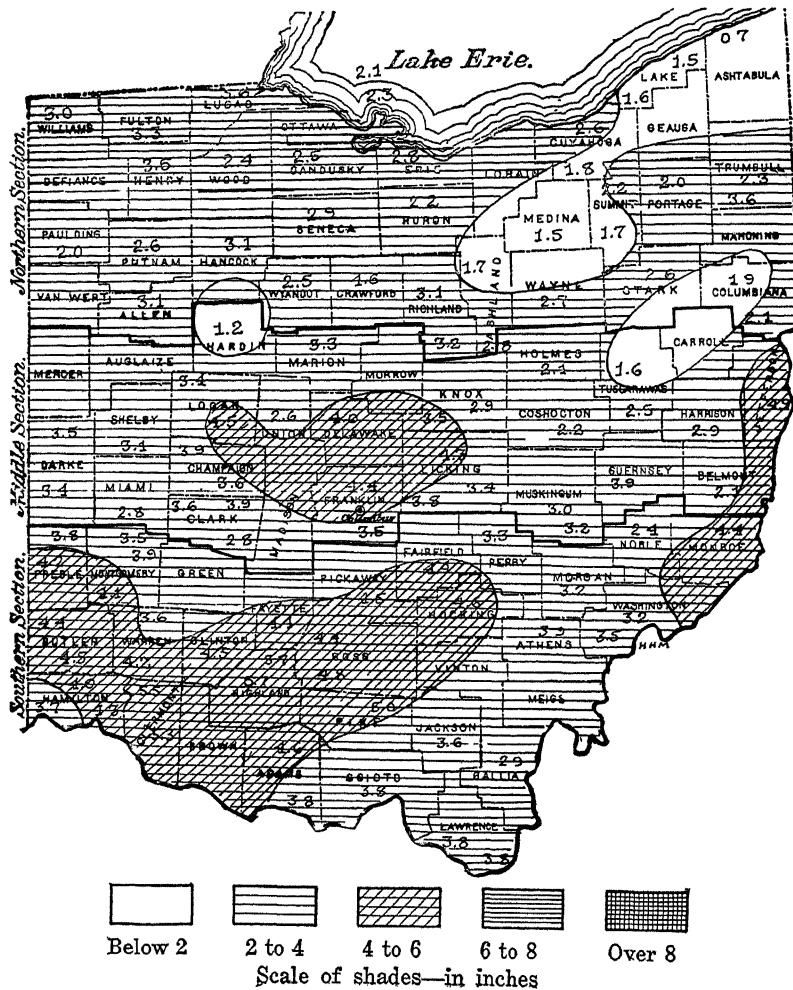


Fig. 3.—The average precipitation for the State during the month of January was 3.23 inches, ranging in station monthly amounts from 5.72 inches at Greenfield to 0.73 inch at Geneva. The greatest fall in any 24 consecutive hours was 2 inches at Bucyrus on the 7th. Snow occurred almost daily, the average number of days reporting precipitation being 13.

Precipitation departures, January, 1918



Fig. 4.—The average precipitation for the State was 0.45 inch below the normal. The deficiency was general throughout the middle and eastern counties, while in the southwestern and northwestern counties, an excess was reported.

Snowfall, January, 1918

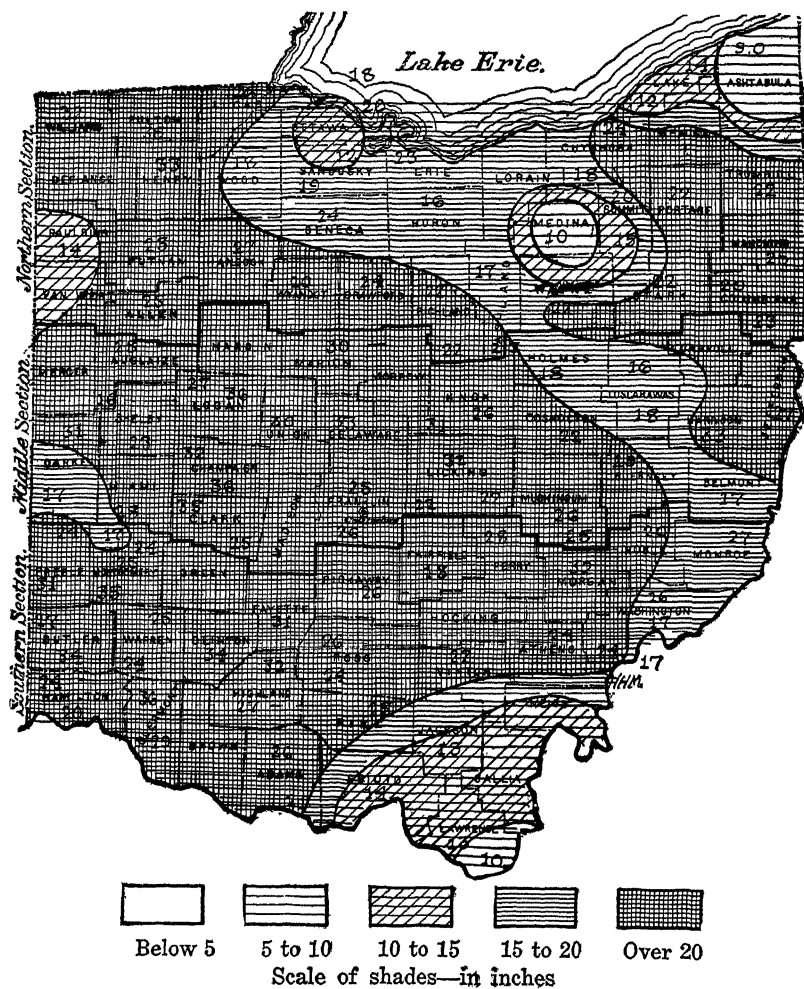


Fig. 5.—The average depth of snowfall for the State during the month was 23.4 inches, unusually heavy, exceeding the snowfall of January, 1910, in many places. The greatest monthly station depth was 36.5 inches at Bellefontaine and Urbana. Snow occurred almost daily throughout the month.

Mean temperatures, February, 1918



Fig. 6.—The mean temperature for the State was 31°, varying from 39.2° at Ironton to 25.6° at Fremont. The highest temperature reported was 78° at Ironton and Portsmouth on the 28th and the lowest was —24° on the 5th, giving a state range in temperature of 102°. The greatest daily range was 55° at Fremont on the 6th.

Temperature departures, February, 1918

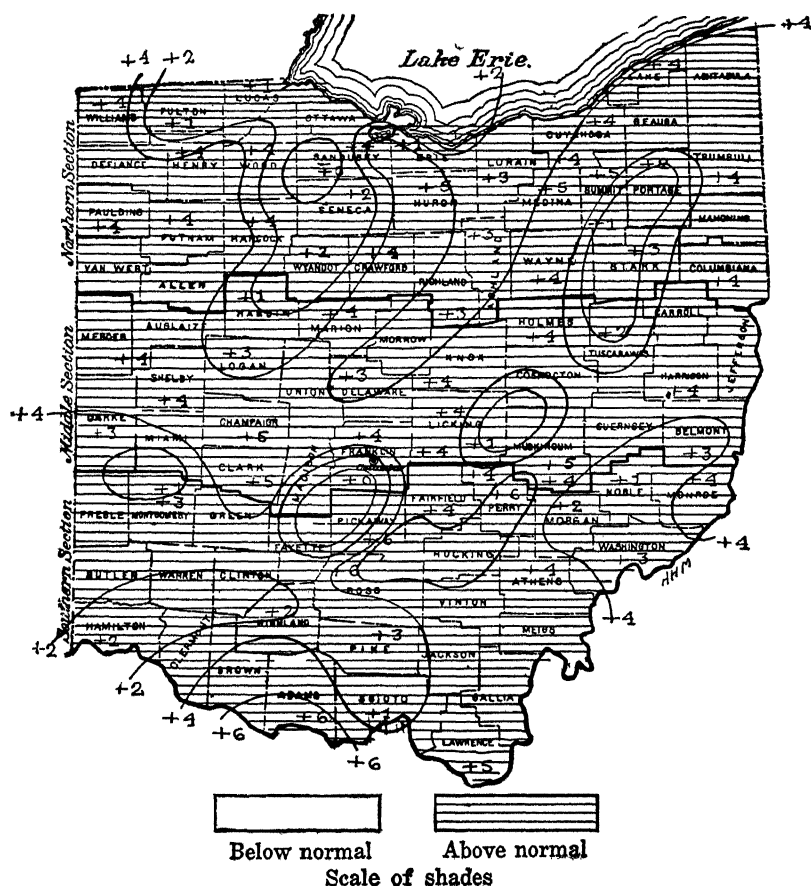


Fig. 7.—The average temperature for the State was 3.4° above the normal. The excess was greatest in the extreme southern and south-central counties and least in northern counties and in scattered interior localities.

Precipitation, February, 1918

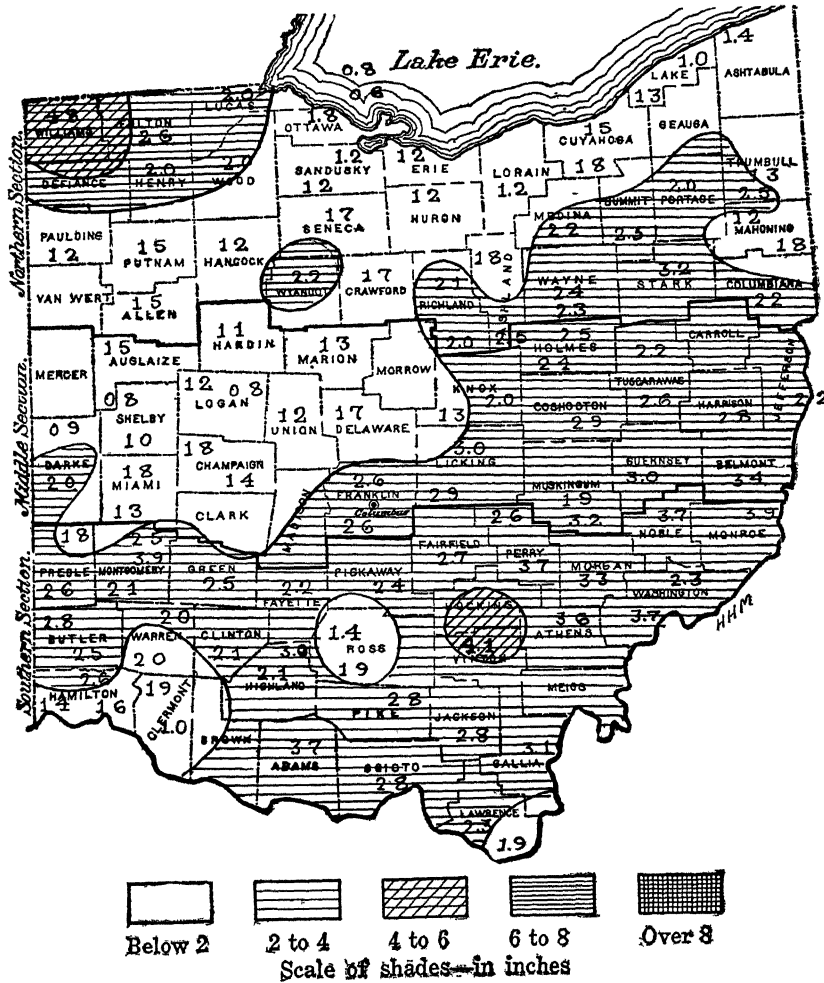


Fig. 8.—The average for the State for February was 2.16 inches, ranging in monthly station amounts from 4.82 inches at Montpelier to 0.64 inch at Put-in-Bay. The greatest 24-hour fall was 1.88 inches at Dayton (Boyer station) on the 25th. The precipitation was frequent, falling on 9 days throughout the month, but was unusually light.

Snowfall, February, 1918



Fig. 10.—The total snowfall was unusually light for the month, owing to the prevalence of mild temperatures, the average monthly amount for the State being but 1.2 inches. The greatest local monthly amount was 4.8 inches at Montpelier, and many stations reported but a trace.

Mean temperatures, March, 1918

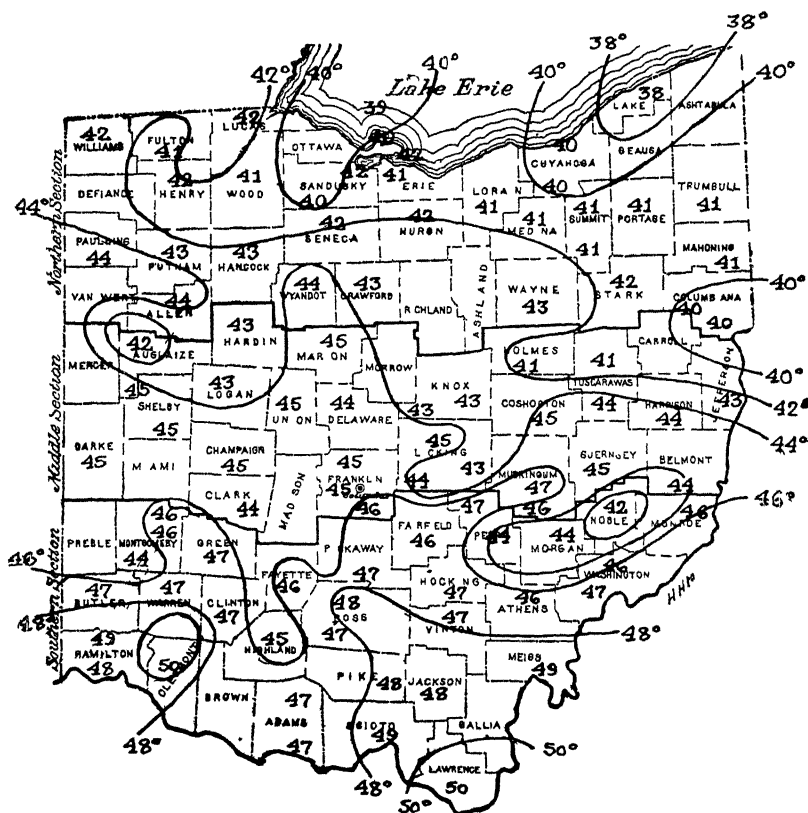


Fig. 11.—The average temperature for the State for the month of March was 44°, ranging in station values from 49.7° at Ironton to 38.4° at Hillhouse. The highest temperature was 82° at Portsmouth on the 9th, at Marion on the 20th and at a number of stations on the 21st. The lowest was 5° at Hillhouse on the 11th, giving a State temperature range of 77°. The greatest daily range was at Delaware on the 29th, 55°.

Temperature departures, March, 1918

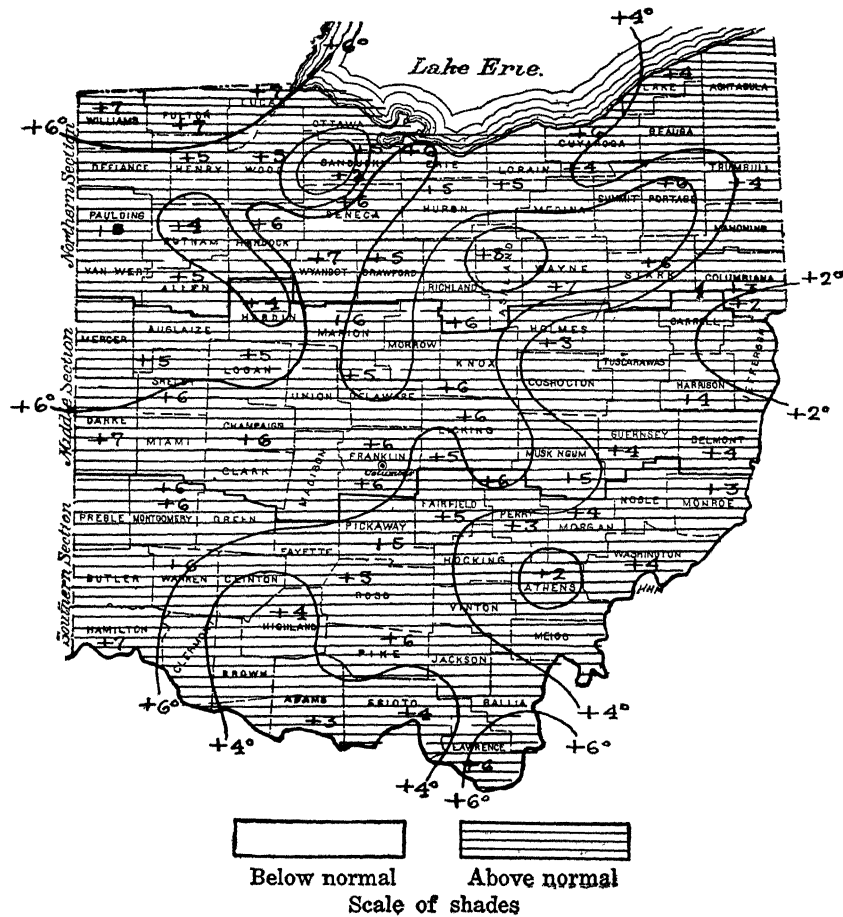


Fig. 12.—The monthly mean for the State was 5° above the normal, the excess being quite general, and greatest in northern interior counties.

Precipitation, March, 1918



Fig. 13.—The average precipitation for the State for March was 2.49 inches, ranging in station monthly amounts from 0.70 inch at Brilliant to 5.24 inches at Ironton. The greatest fall in any 24-hour period was 2.90 at Frankfort, Ross County, on the 12th. Precipitation fell on 9 days during the month.

Precipitation departures, March, 1918



Fig. 14.—The average precipitation for the State was 1.06 inches below the normal. The deficiency was general, with the exception of the extreme north-eastern counties, and local areas of excess in the central and southern parts of the State. The deficiency was greatest in the east and east-central portions.

Snowfall, March, 1918



Fig. 15.—The average snowfall for the State for the month of March was 1.2 inches, which, considering the temperature excess for the month, was heavy. The greatest local monthly amount was 4 inches at Hiram, Portage County, from which amount the falls decreased to a trace in the southwestern counties.

Mean temperatures, April, 1918

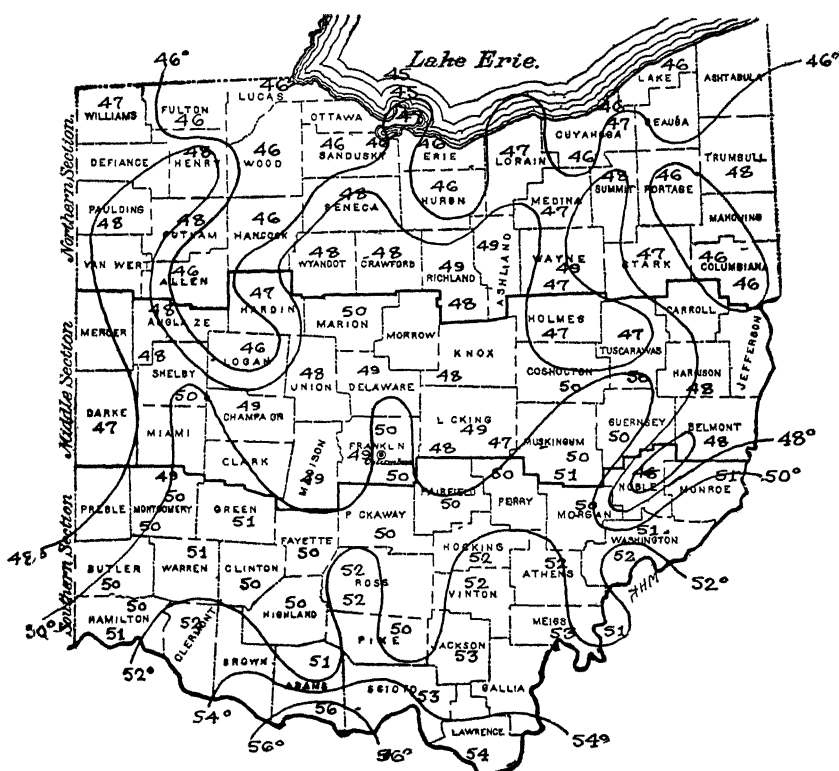


Fig. 16.—The mean temperature for the State was 48.7°, ranging from 55.8° at Green to 44.6° at North Bass Island. The highest temperature recorded was 83° at Ironton and Portsmouth on the 2d, and the lowest was 18° at Green Hill, Hillhouse and Millport on the 5th.

Temperature departures, April, 1918



Fig. 17.—The mean temperature for the State was 1.2° below the normal, and this deficiency was quite general, although slight excesses occurred in central and southern counties and over the extreme northeastern portion. The deficiency was greatest in Darke County.

Precipitation, April, 1918

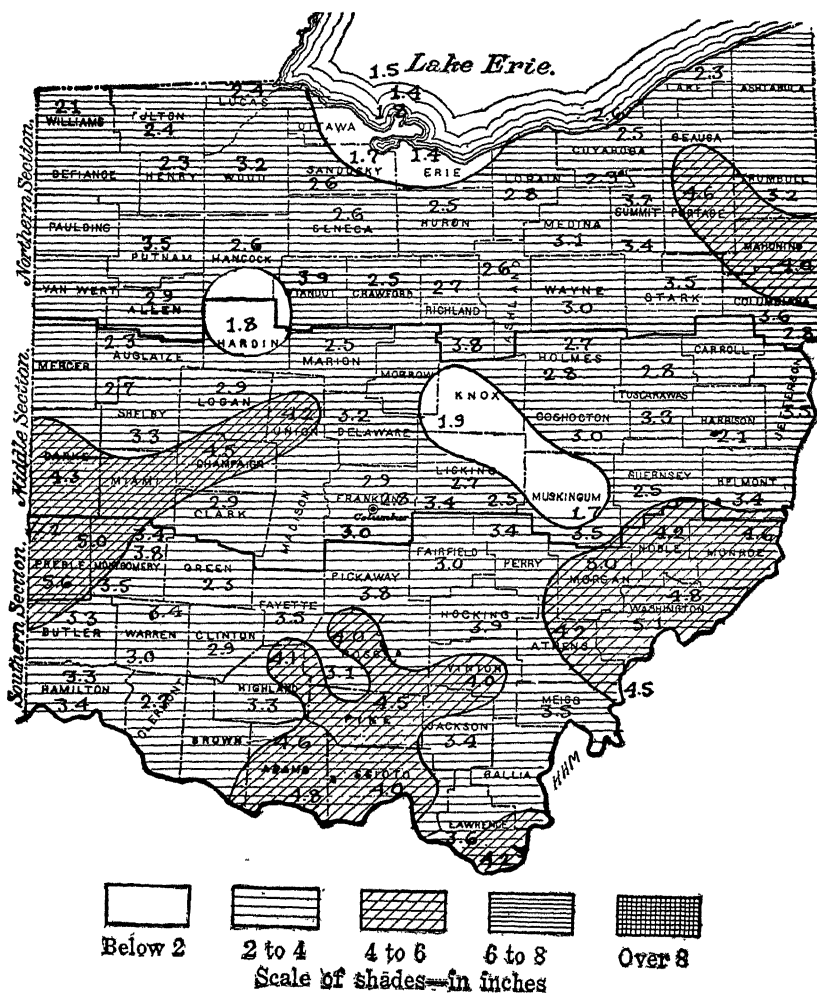


Fig. 18.—The average precipitation for the State during this month was 3.23 inches, the monthly station amounts ranging from 1.21 inches at Danbury to 5.62 inches at Eaton. The greatest 24-hour amount was 2.25 inches at Oxford on the 17th.

Snowfall, April, 1918

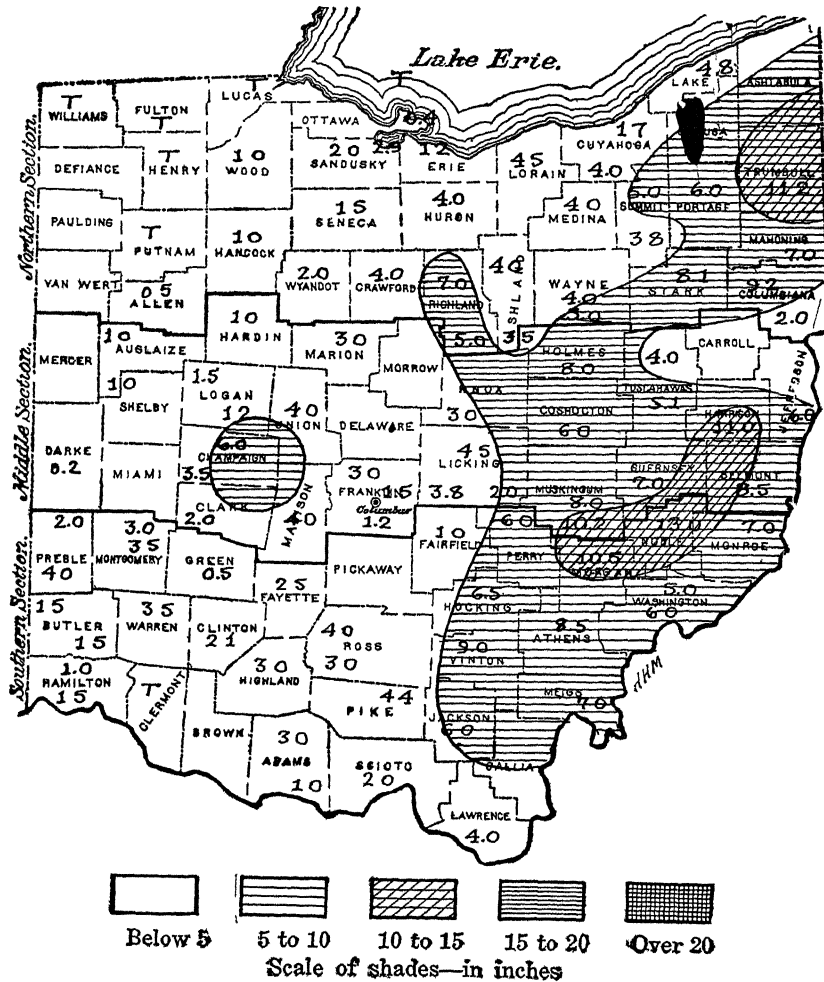
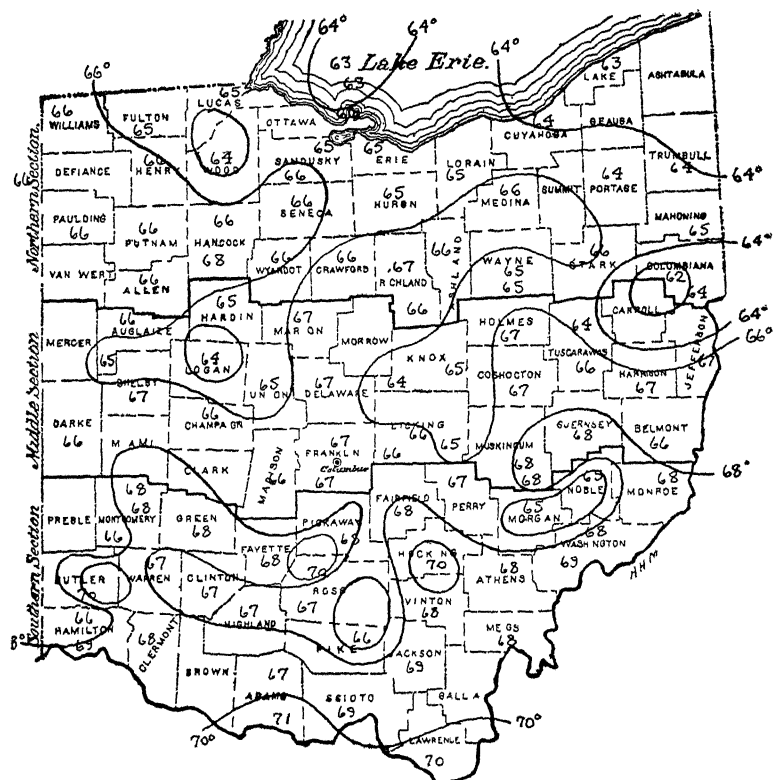


Fig. 20.—The average snowfall for the State was 3.7 inches and the greatest local monthly amount was 13 inches at Summerfield. The area of heaviest fall occurred in the eastern half of the State. The fall was, in several counties, several inches greater than the normal.

Mean temperatures, May, 1918



Temperature departures, May, 1918



Fig. 22.—The mean temperature for the State was 5.6° above the normal. While the excess was prevalent over the entire State, it was greatest in central and northwestern counties, and least in southern and eastern districts.

Precipitation, May, 1918

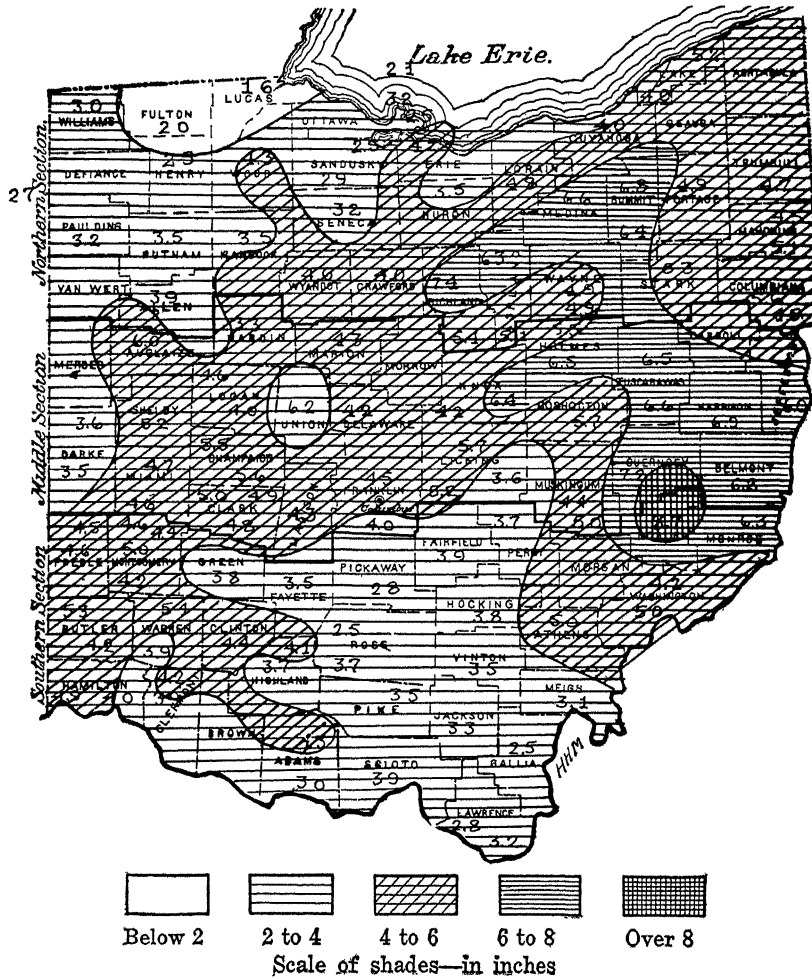


Fig. 23.—The average precipitation for the State during this month was 4.49 inches, ranging in amounts from 1.60 inches at Toledo to 8.67 inches at Summerfield. The greatest local amount falling in any 24 consecutive hours was 2.92 inches at Dayton (2) on the 12th. The average number of days with 0.01 inch or more precipitation was 12.

Northern Section

Middle Section

Southern Section

Below normal

Above normal

Scale of shades

Fig. 24.—The average rainfall for the State during May was 0.92 inch above the normal. This excess covered the greater portion of the State, although slight deficiencies occurred in northwestern and south-central counties. The excess was greatest in Noble County.

Snowfall, May 1918



Fig. 25.—Snowfall of light, unimportant amounts occurred over several northern counties during the month, and over one county in the east-central portion. The excess of temperature, however, sufficed to cause the greater part of the monthly precipitation to fall as rain.

Mean temperatures, June, 1918

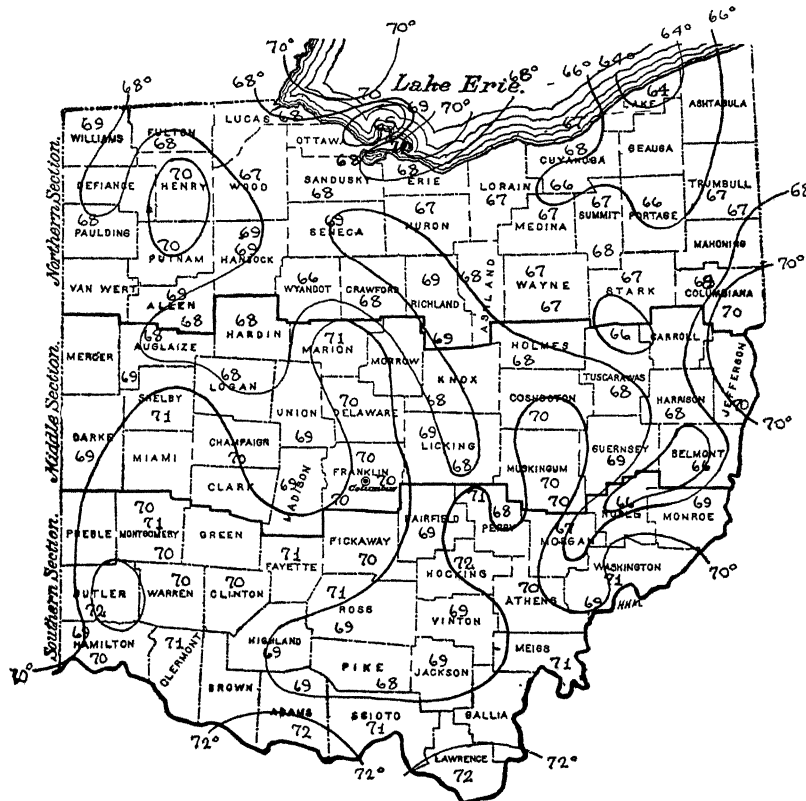


Fig. 26.—The average temperature for the State was 68.8°, varying from 71.8° at Green and Hamilton as the highest to 64.3° at Green Hill as the minimum. The highest temperatures reported were 98° at Green and Portsmouth on the 17th and the lowest was 33° at Green Hill on the 24th. The monthly range was 65°.

Precipitation, June, 1918

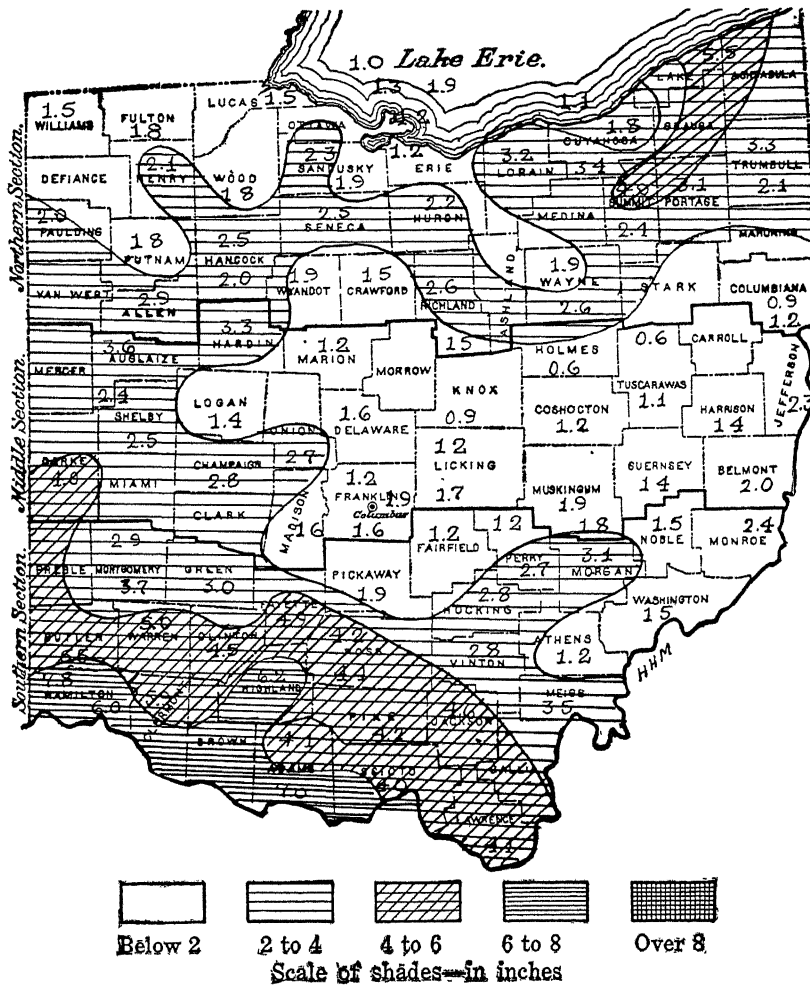


Fig. 28.—The average precipitation for the State was 2.68 inches. The greatest monthly station amount was 7.75 inches at Mount Healthy, Hamilton County, and the least was 0.55 inch at Dover. The greatest amount in any 24 consecutive hours was 3.12 inches at Mulberry on the 25th. The average number of days with 0.01 or more precipitation was 8.

Precipitation departures, June, 1918



Fig. 29.—The average precipitation for the State was 1.36 inches below the normal. The region of greatest deficiency was slightly southeast of the central portion of the State. Excesses were noted in the southwestern counties as well as the northeastern counties, the greatest excess being 2.8 inches in southern Adams County.

Mean temperatures, July, 1918



Fig. 30.—The average temperature for the State was 71.3°, with the highest station average 74.4° at Haydenville and the lowest 67.6° at Green Hill. The highest temperature for the month was 101° at Paulding on the 21st and the lowest was 38° at Green Hill and Millport on the 2d and Milligan on the 9th. The greatest daily range was 51° at Milligan on the 20th.

Temperature departures, July, 1918



Fig. 31.—The mean temperature for the month was 2.3° below the normal. The deficiency was general over the State, being greatest in Highland and Pike Counties and least in the extreme Northwest.

Rainfall, July, 1918

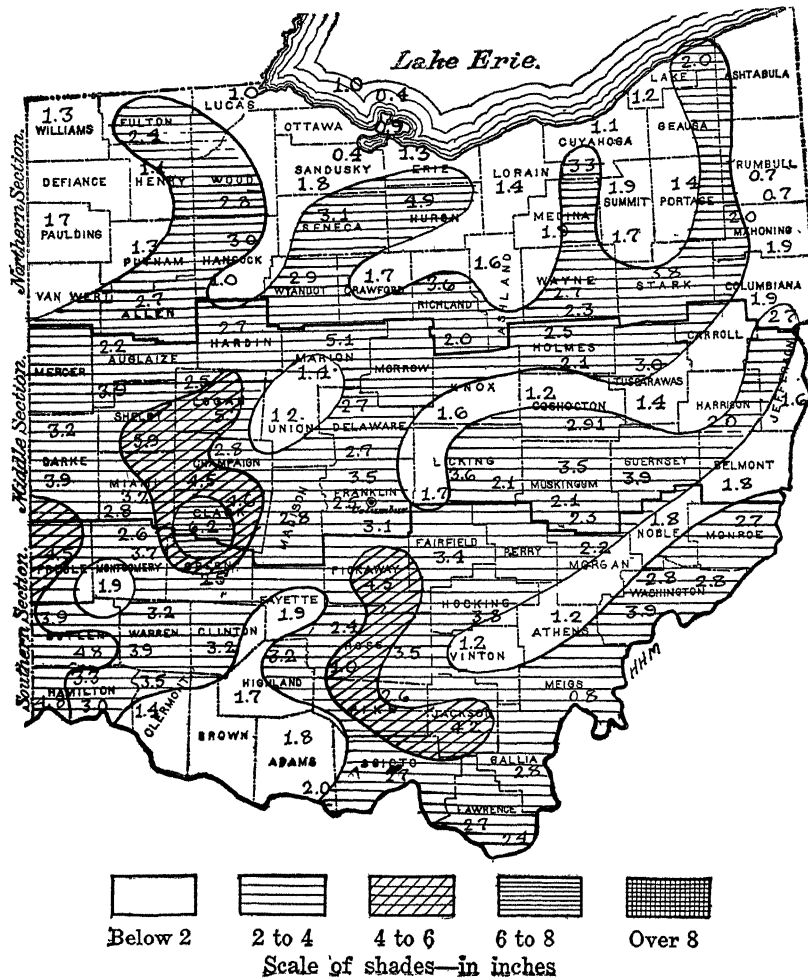


Fig. 82.—The average precipitation for the State was 2.61 inches and the amounts ranged from 6.21 inches at New Carlisle to 0.36 inch at Vickery. The greatest daily rainfall was 2.95 inches at Sidney on the 28th. The average number of days with rain was 8.

Precipitation departures, July, 1918



Fig. 33.—The average precipitation for the month was 1.56 inches below the normal. However, the deficiency was not general, several central and western counties reporting excesses, the greatest of which was 2.3 inches in Shelby County. The deficiency was greatest in Athens County, 3.3 inches, in Trumbull County, 3.5 inches, and in Sandusky County, 3.6 inches.

Mean temperatures, August, 1918



Fig. 34.—The average temperature for the State during this month was 76.6°, the station means ranging from 79.7 at Haydenville to 72.6° at Hiram. The highest recorded temperature was 110° at Amesville on the 6th and the lowest was 41° at Geneva on the 3d. The high temperatures of the 5th and 6th broke all August records at the greater portion of the stations within the State and at quite a number broke all records. The greatest daily range of temperature was 49° at Canfield on the 16th.

Temperature departures, August, 1918



Fig. 35.—The average temperature of the State for the month was 5° above the normal. It was warmer than any August since 1887. The greatest excess occurred over a narrow strip lying through the central counties, extending from the extreme northwestern part to the extreme southeastern part of the State.

Precipitation, August, 1918

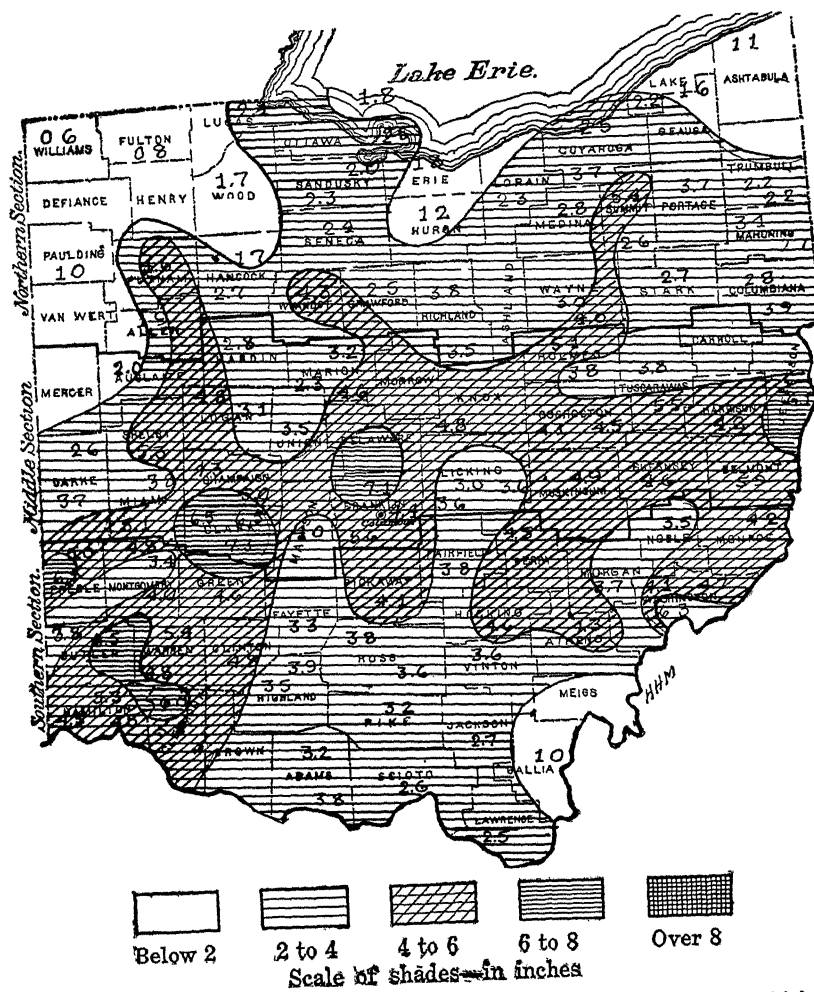


Fig. 36.—The average rainfall for the State for this month was 3.64 inches. The station amounts ranged from 7.32 inches at Springfield (2) to 0.65 inch at Montpelier, rain falling on 9 days during the month. The greatest fall in any 24 consecutive hours was 2.82 inches at Springfield (1) on the 30th.

Precipitation departures, August, 1918



Fig. 37.—The average precipitation for the State was 0.07 inch above the normal. The region extending from the southwestern counties northeastward over the interior of the State, thence eastward to the Ohio-Pennsylvania boundary line, was the region of excess, while the districts to the north and south of this area showed a marked deficiency. The greatest local excess occurred in Franklin County and the greatest deficiency occurred in Williams County.

Mean temperature, September, 1918



Fig. 38.—The monthly mean temperature for the State was 58.4°. The highest station monthly mean was 63.7° at Green, and the lowest 55.2° at Green Hill, while the highest temperature for the month was 89° at Portsmouth on the 4th and 5th and the lowest was 27° at Delaware on the 22d, thus giving a range of 62° for the State, while the greatest daily range was 51° at Jackson on the 30th. At many stations the mean was the lowest on record for September.

Temperature departures, September, 1918



Fig. 39.—The mean temperature for the State was 7.4° below the normal. The deficiency was general over the State, and greatest in Highland and Logan Counties and least in localities in eastern and northwestern portions.

Rainfall, September, 1918

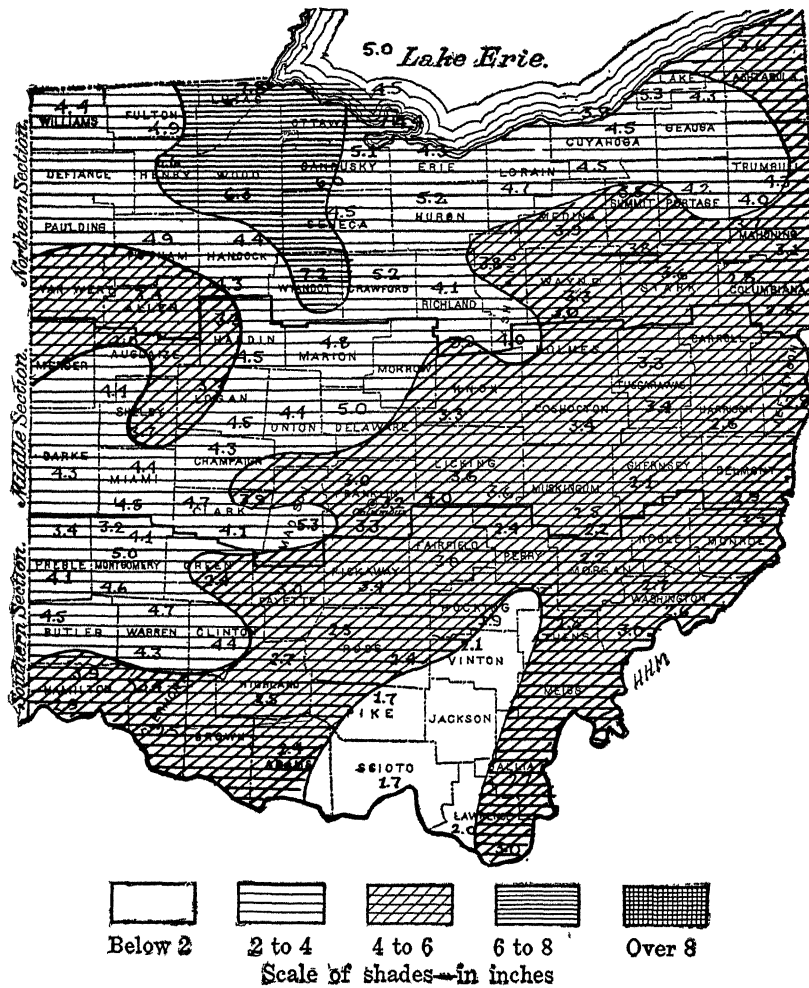


Fig. 40.—The average precipitation for the State was 3.75 inches. The greatest monthly station amount was 7.78 inches at Toledo and the least was 1.70 inches at Waverly. The greatest fall in any 24 consecutive hours was 5.98 inches at Toledo on the 4th and 5th. The average number of days with 0.01 inch or more rain was 9.

Rainfall departures, September, 1918



Fig. 41.—The average precipitation for the State was 1.09 inches above the normal. The excess was general over the northern portion, while a slight deficiency obtained over the southern counties. The region of greatest excess centered about Lucas County and that of the greatest deficiency about Scioto and southern Muskingum Counties.

Mean temperatures, October, 1918



Fig. 42.—The mean temperature for the State was 56.6°, ranging from 61.1° at Green to 52.6° at Wauseon. The highest recorded temperature was 89° at Jackson on the 3d and 6th, and the lowest was 22° at Millport on the 22d. The absolute range of temperature for the State was 67°.

Temperature departures, October, 1918



Fig. 43.—The mean temperature was 3.2° above the normal and the excess was generally distributed. It was, however, greater in the central and north-eastern districts and along the Ohio River than over the northwestern sections.

Precipitation, October, 1918



Fig. 44.—The average rainfall for the State was 2.71 inches, ranging in station amounts from 4.88 inches at Green to 1.13 inches at Sandusky. The greatest 24-hour rainfall during the month was 1.47 inches at Columbus Reservoir on the 6th. No snow of any consequence was reported during the month.

Mean temperatures, November, 1918



Fig. 46.—The average temperature for the State was 42.3°, ranging in station means from 45.4° at Brilliant to 39.6° at Bellefontaine. The highest temperature during the month was 75° at Peebles on the 6th and at Waverly on the 7th; the lowest was 15° at Amesville on the 26th, at Gambier on the 24th and at Milfordton on the 11th. The greatest daily range was 46° at Toboso on the 28th.

Temperature departures, November, 1918



Fig. 47.—The average temperature for the State was 1.1° above the normal. The excess was general, although there were areas of deficiency in Scioto Valley counties in the west-central districts. The excess was greatest in the northern tier of counties, and the deficiency was greatest in Highland County.

Precipitation, November, 1918

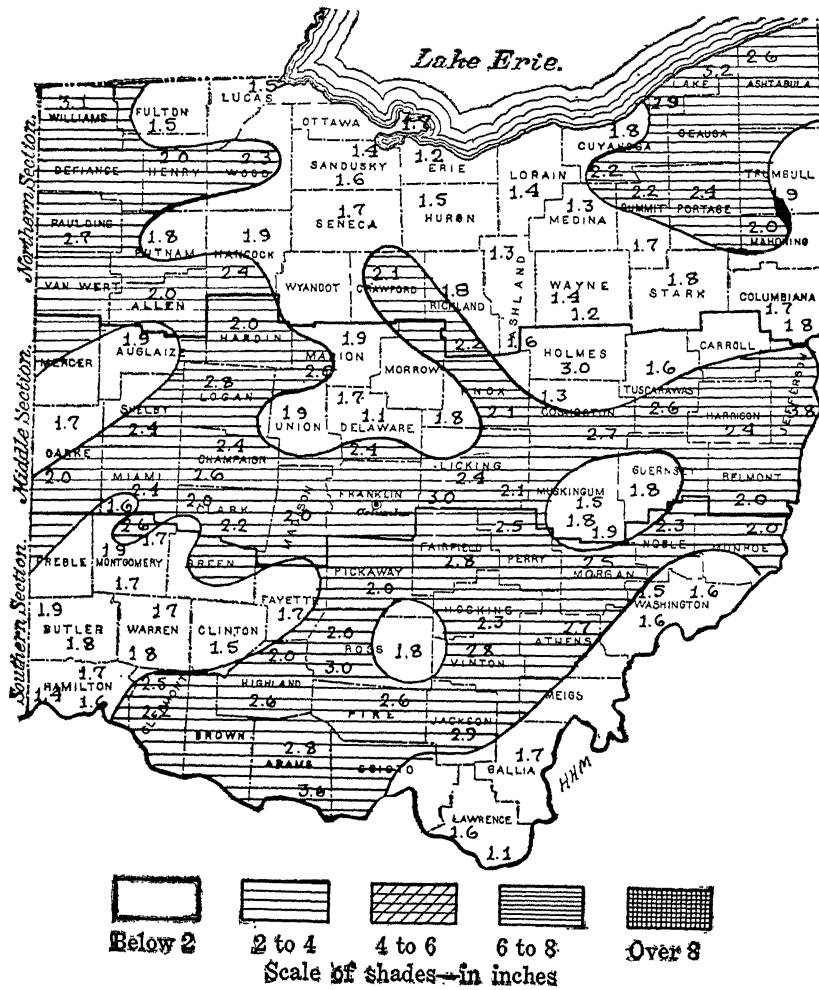


Fig. 48.—The average precipitation over the State this month was 2.02 inches, ranging in station monthly amounts from 3.76 inches at Brilliant to 1 inch at West Manchester. The heaviest rain (24-hour period) was 2.08 inches at Green on the 17th. The average number of rainy days was 8.

Precipitation departures, November, 1918



Fig. 49.—The average precipitation for the State was 0.60 inch below the normal. This deficiency was general, although areas of excess were noted in the southeastern and extreme northwestern portions of the State. The deficiency was apparently greatest in the southwestern and central counties.

Snowfall, November, 1918



Fig. 50.—The average snowfall for the State was but little over a mere trace. A fall of 2 inches was reported from Cuyahoga and Summit Counties, with much lighter falls at various scattered localities throughout the State.

Temperature departures, December, 1918



Fig. 52.—The average temperature for the State was 8.4° above the normal. While the excess was general, it was greatest over areas in the east and south central portions, and least in Scioto County.

Precipitation departures, December, 1918

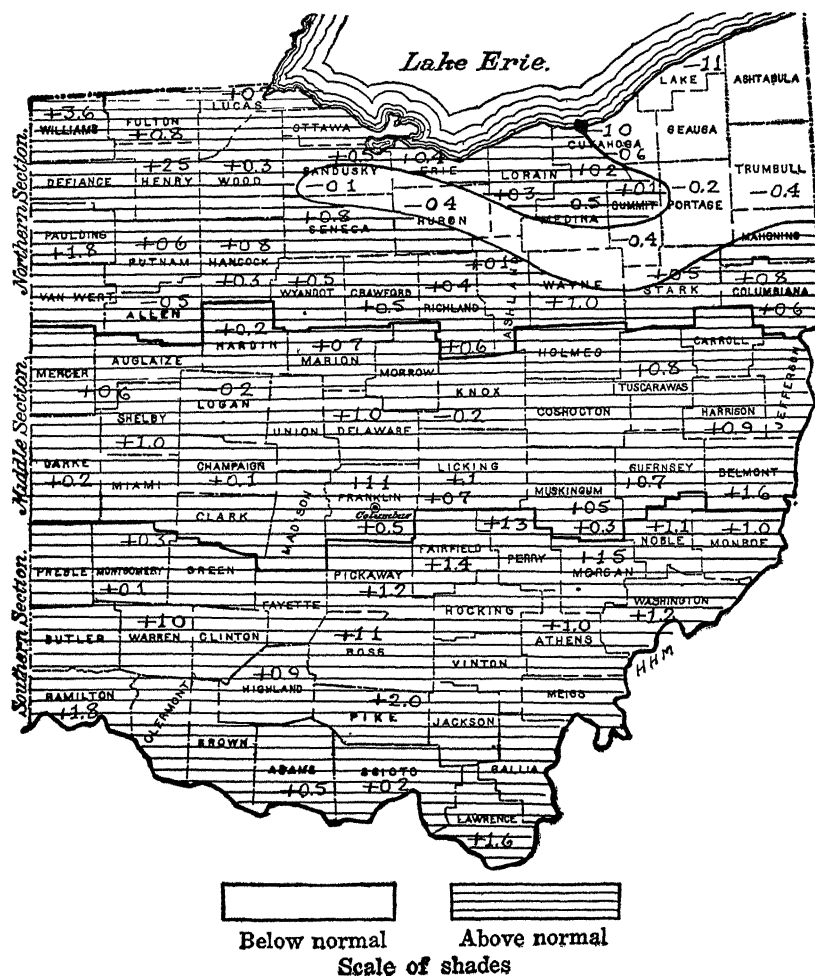


Fig. 54.—With the exception of the extreme northeastern counties, the precipitation was generally above normal. For the State, the excess averaged 0.61 inch. This excess was greatest in Williams County and least in districts in the south and west portions.

Snowfall, December, 1918



Fig. 55.—The snowfall for the month was greatly below the December average. Many stations reported but a trace, and several reported none. Only two favored districts in the eastern half of the state reported more than 5 inches. The average for the State was 1.2 inches and the greatest monthly fall was 7 inches at Hiram, Portage County.

Temperature departures, 1918



Fig. 57.—The average temperature for the State was 0.5° above the seasonal average. This excess was general over the State, embracing all districts except a narrow strip between the Great Miami and the Scioto Valleys, and a small area in the east portion.

Annual precipitation, 1918

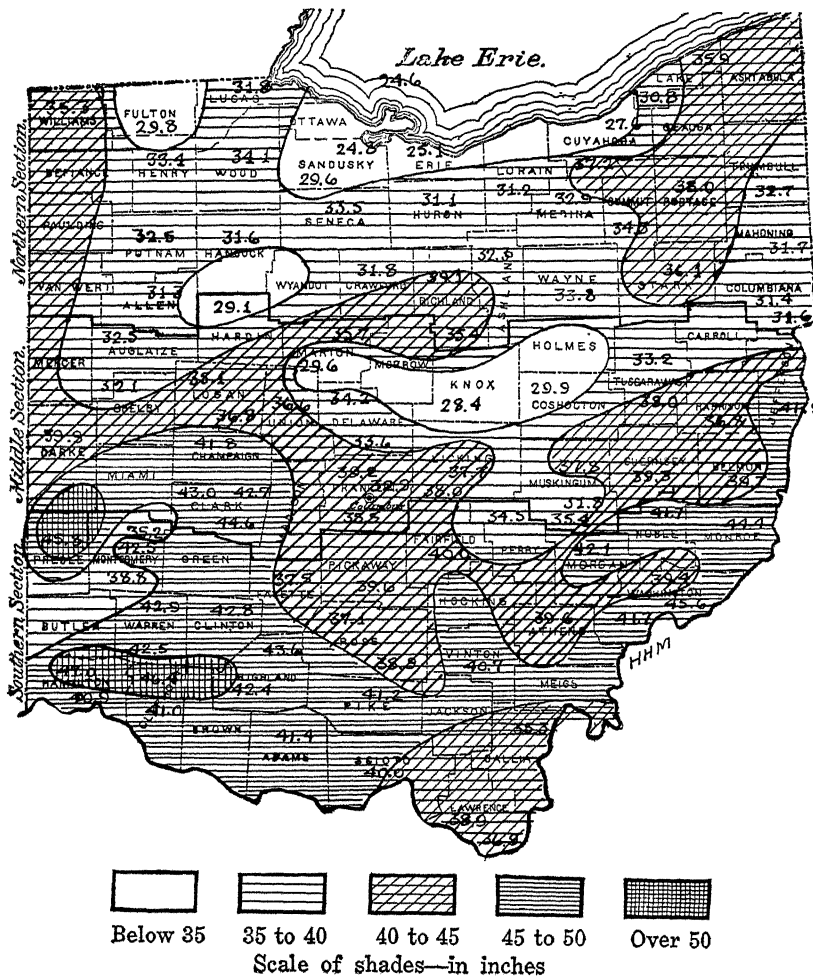


Fig. 58.—The average precipitation for the State was 36.54 inches, and the greatest station annual amount was 47.05 inches at Mount Healthy, while the lowest was 24.59 inches at Put-in-Bay. The greatest monthly amount of precipitation was 8.67 inches at Summerfield in May and the least was 0.36 inch at Vickery in July. There were 117 days with 0.01 inch or more precipitation.

Snowfall, 1918

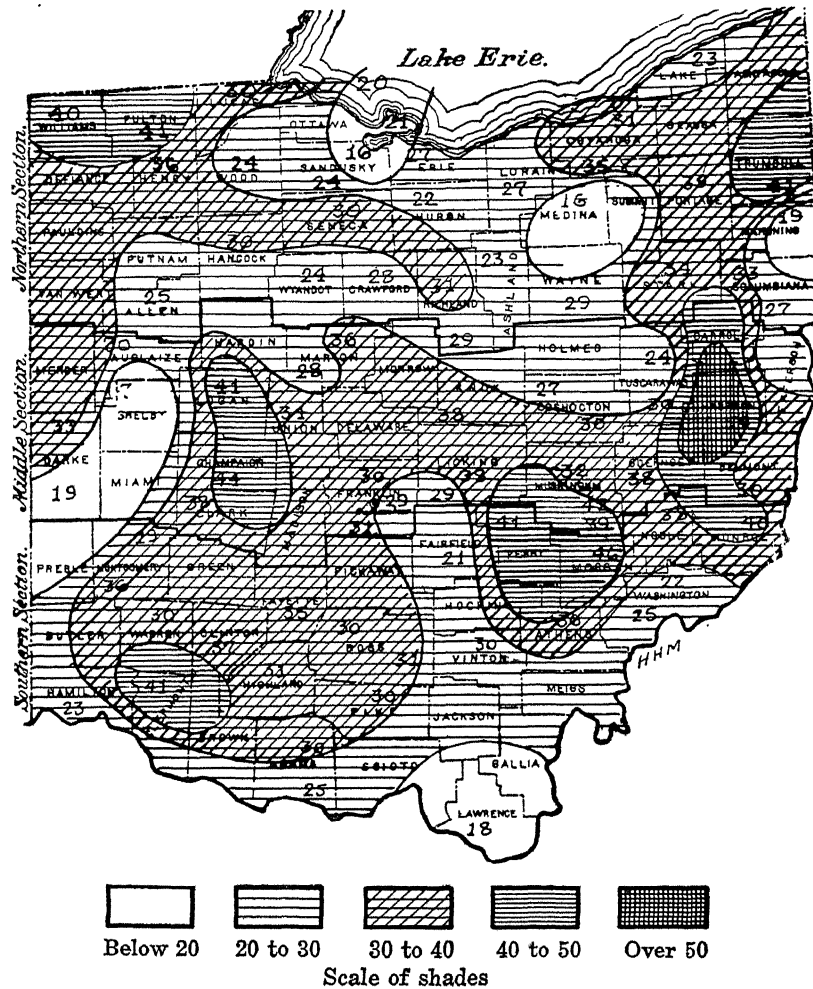


Fig. 60.—The average snowfall for the year was 30.2 inches. The greatest local annual amount was 53.8 inches at Cadiz, and the least was 15.9 inches at Vickery. The heaviest snows fell during January, while in November and December, practically none was noted.

Date of last killing frost in spring, 1918



Fig. 61.—The map above shows the dates on which the last killing frost occurred in the spring of 1918 at the different stations in the State.

Date of first killing frost in autumn, 1918



Fig. 62.—The map above shows the dates on which the first killing frost occurred in the autumn of 1918 at the different stations in the State.

CLIMATOLOGICAL DATA FOR OHIO FOR 1918.

Month	Temperature								Number of Days				Precipitation		Wind
	Mean	Highest	Date	Lowest	Date	Range	Greatest Daily Range	Date	Clear	Partly Cloudy	Cloudy	.01 or More	Monthly	Monthly Snow	
January.....	14.9	49	6*	-28	20	77	56	21	9	7	15	13	3.23	23.4	S. W.
February.....	31.0	78	28	-24	5	102	55	6	9	10	8	9	2.16	1.2	S. W.
March.....	44.0	82	9*	5	11	77	55	29*	7	18	6	7	2.49	0.6	S. W.
April.....	48.7	83	2	18	5	65	47	15	13	8	8	13	3.23	3.7	N. E.
May.....	66.4	98	26	26	2	72	47	5	12	14	11	12	4.49	T	S. W.
June.....	68.8	98	17	33	23	65	51	24	8	15	10	8	2.68	O	S. W.
July.....	71.3	101	21	38	2*	63	51	20	8	14	11	8	2.61	O	S. W.
August.....	76.6	110	6	41	3	69	49	16	9	14	11	9	3.64	O	S. W.
September.....	58.4	89	4*	27	22	62	51	30	9	13	8	9	3.75	O	N. W.
October.....	56.6	89	3*	22	22	67	57	9	9	13	8	9	2.71	T	S. W.
November.....	42.3	75	6*	12	26	63	51	14	8	12	5	8	2.02	0.1	S. W.
December.....	39.3	72	10	12	30	60	39	19	12	7	6	12	3.53	1.2	S. W.
Mean or Total.....	51.5	110	Aug. 6	-28	Jan. 20	138	57	Oct. 9	113	147	99	117	36.54	30.2	S. W.

*And on other dates also.

METEOROLOGICAL SUMMARY

EXPLANATION OF TABLES

The following tables contain statistics of temperature, rainfall, etc., for the year, and are compiled from data obtained from daily observations. T stands for "trace"—less than 0.01 inch of rainfall. Temperature is given in degrees Fahrenheit.

Table I shows the daily rainfall at the Experiment Station at Wooster during the year in inches and hundredths.

Table II shows the daily mean temperature for each day of 1918 and the monthly mean temperature with the 31-year average.

Table III gives the monthly mean temperature at the Station with the 31-year average for the same.

Table IV gives the monthly mean rainfall at the Station with the 31-year average for the same.

Table V gives the monthly mean temperature for the State for 1918 with the 31-year average.

Table VI gives the monthly mean rainfall for 1918 with the 31-year average for the State.

Table VII gives the monthly mean temperature and rainfall for the Station and State for 1918 with the 31-year average.

Table VIII contains the mean temperature, the highest and lowest temperatures with the range of temperature for each month; the number of clear, partly cloudy and cloudy days; the rainfall, snowfall and prevailing direction of wind, for both the Station and State for 1918.

Table IX contains the principal points of interest on temperature, rainfall, and state of weather at the Station and for the State during the year, and a grand summary for 31 years.

Table X gives the date of the last killing frost in the spring, and the first killing frost in autumn, length of the growing season, also the number of times the mercury fell below zero in each winter month since 1894.

Table XI gives the highest and lowest temperature for each month during the last 31 years for both the Station and State.

Table XII gives the total and average precipitation at the different district and county experiment farms.

Table XIII gives the monthly mean temperature at the district experiment farms.

Table XIV gives the daily evaporation and wind movement at the Experiment Station at Wooster for 1916, 1917 and 1918.

TABLE I.—DAILY RAINFALL AND MELTED SNOW FOR 1918 AT THE EXPERIMENT STATION.

Date	January	February	March	April	May	June	July	August	September	October	November	December	Date
1.....	T	.....	.90	T	.01	T	.20	.....	.....	.....	T	.....	1
2.....	.30	.....	.....	T	.....	.40	.....	.....	.....	.....	.....	.....	2
3.....	.....	.02	.....	.52	.....	.....	.....	.....	.23	.07	.....	.15	3
4.....	.....	T	.16	.....	.....	.09	.....	.....	T	.....	.05	.09	4
5.....	.....	.....	.....	.....	.....	T	.....	.....	.92	.....	.....	.....	5
6.....	.25	.06	.....	.....	.....	.18	.....	.....	.....	1.10	.....	.....	6
7.....	T	.....	.10	T	.43	.....	T	T	.....	.....	.....	.....	7
8.....	.15	T	.....	.44	T	.....	.....	.01	.....	.....	.....	.....	8
9.....	T	.32	.28	.....	.03	.....	.....	.....	.....	.....	.16	.23	6
10.....	T	.....	.02	.40	.40	T	.....	.15	T	.....	.....	.55	10
11.....	T	.....	.02	T	.10	.....	.15	.17	.11	.....	.....	.27	11
12.....	.36	.25	.....	T	.90	.....	.40	.58	.45	.15	.....	.....	12
13.....	.....	.....	.48	T	.86	.....	.....	.....	.....	.....	.....	.55	13
14.....	.....	.....	.04	.....	.....	.01	.....	.....	.....	.....	.....	.60	14
15.....	.60	.28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.12	15
16.....	.....	T	.....	.15	.....	.....	.02	.....	.96	.....	T	.....	16
17.....	T	T	.....	.25	.....	.14	.02	T	.18	.....	.55	.....	17
18.....	.....	.....	.....	T	.....	.....	.....	.....	.03	T	.15	.....	18
19.....	.....	.69	.....	T	.09	.....	T	.....	.24	.....	.25	.....	19
20.....	.....	.33	.....	.01	.41	.....	.....	.....	.14	.42	.15	.....	20
21.....	.....	T	.....	.45	.....	T	.....	.60	.01	.01	T	.....	21
22.....	.20	.05	T	.03	.30	.74	T	.03	.....	.....	.02	.38	22
23.....	.....	.....	.01	.30	.41	T	.78	.....	.....	.....	T	.....	23
24.....	.20	.12	.....	.02	T	.....	.....	.....	.....	.02	.....	.24	24
25.....	.20	.02	.....	.....	.23	.25	T	.....	.....	.01	.....	.08	25
26.....	.20	.15	T	.07	.....	.....	.....	.06	.....	.05	.....	T	26
27.....	T	.....	.....	.02	.12	.....	.....	.....	.....	.02	.....	T	27
28.....	.20	.10	.....	.02	.35	.10	.66	.65	.....	.76	.10	.10	28
29.....	.....	.....	.....	.28	.03	.....	T	.....	.....	.....	T	T	29
30.....	.....	.....	.....	.....	.20	.....	.45	.67	T	.21	.....	.....	30
31.....	.....	.....	.....	.....	.01	.....	.....	.11	.....	T	.....	.05	31
Total	2.66	2.39	2.01	2.96	4.88	1.91	2.68	3.03	3.27	2.82	1.43	3.71	
Aaxerge .....	.086	.085	.065	.099	.157	.064	.086	.098	.109	.091	.048	.120	

TABLE II.—MEAN TEMPERATURE FOR EACH DAY OF 1918 AT THE EXPERIMENT STATION.

Date	January	February	March	April	May	June	July	August	September	October	November	December	Date
1.....	6.0	5.5	34.5	61.0	47.0	78.5	65.0	64.0	63.5	44.5	40.0	33.5	..... 1
2.....	11.5	4.5	39.5	62.5	50.0	75.0	58.5	68.0	65.0	63.5	38.0	34.0	..... 2
3.....	6.0	22.0	37.5	53.5	65.0	69.0	73.0	70.5	70.5	62.0	43.0	35.0	..... 3
4.....	5.5	7.0	33.0	35.0	69.0	70.5	74.0	81.5	67.0	53.0	49.5	34.5	..... 4
5.....	21.5	-6.5	49.0	35.5	68.0	71.0	76.0	87.0	64.5	67.5	43.5	30.5	..... 5
6.....	28.0	22.5	44.5	48.0	70.0	71.0	72.5	90.0	55.5	66.0	46.0	37.0	..... 6
7.....	30.5	34.0	28.5	57.0	68.0	68.5	68.0	88.5	57.5	50.5	51.5	39.0	..... 7
8.....	17.5	32.0	39.5	44.5	60.0	58.5	60.0	83.0	61.5	49.5	52.5	53.5	..... 8
9.....	15.5	35.0	41.5	32.5	59.5	64.0	60.0	83.0	62.0	55.0	51.5	41.0	..... 9
10.....	19.5	30.5	39.5	30.5	61.5	70.0	65.0	78.5	63.0	54.0	43.5	41.5	..... 10
11.....	20.0	39.0	33.0	35.5	46.5	66.5	66.5	82.0	56.5	59.5	37.5	44.0	..... 11
12.....	11.0	46.5	49.5	36.0	64.0	69.5	64.5	79.5	60.0	63.5	37.0	36.5	..... 12
13.....	0.5	38.5	45.5	44.5	55.0	60.0	66.0	84.5	54.5	61.5	40.5	48.0	..... 13
14.....	13.5	45.5	57.5	45.0	57.0	65.5	67.5	80.5	56.5	49.5	40.5	51.5	..... 14
15.....	17.0	41.5	39.5	56.0	59.0	60.0	67.0	69.5	65.0	47.5	46.5	40.0	..... 15
16.....	12.0	29.0	35.0	57.0	65.0	65.0	69.5	68.5	62.5	59.5	53.5	35.5	..... 16
17.....	17.5	19.5	44.5	57.5	66.5	74.0	72.0	69.5	56.5	58.5	59.5	34.0	..... 17
18.....	9.0	26.0	49.5	55.5	68.5	66.0	68.0	69.0	54.0	56.0	51.0	37.5	..... 18
19.....	2.0	47.5	59.5	43.5	69.5	59.5	71.5	68.0	50.0	48.5	40.0	41.0	..... 19
20.....	-0.5	36.5	53.0	47.0	69.5	62.5	69.5	69.5	49.0	54.5	39.5	38.5	..... 20
21.....	0.5	10.5	58.5	50.5	66.5	68.0	76.0	71.0	46.0	46.0	36.5	48.0	..... 21
22.....	15.0	21.5	55.0	51.5	73.5	58.0	79.5	76.0	48.0	45.5	35.0	48.0	..... 22
23.....	12.0	34.5	38.5	52.5	60.0	54.0	77.0	78.5	51.5	54.5	31.5	43.0	..... 23
24.....	19.5	45.5	41.5	44.5	58.5	61.0	77.0	74.0	56.0	57.5	29.0	41.5	..... 24
25.....	28.5	43.0	39.5	41.0	74.0	68.5	78.5	73.5	58.0	60.5	29.0	37.0	..... 25
26.....	23.0	39.5	37.5	49.5	78.0	67.0	78.5	76.0	55.5	64.0	32.0	24.5	..... 26
27.....	12.0	38.5	32.5	56.5	76.5	70.0	80.5	66.0	52.0	61.5	33.0	25.5	..... 27
28.....	22.5	40.0	35.0	61.5	72.5	75.5	78.5	71.5	59.0	59.5	49.5	24.0	..... 28
29.....	17.0	....	41.5	56.5	73.5	75.0	75.0	72.5	55.5	47.5	42.5	23.0	..... 29
30.....	15.5	....	46.5	56.0	72.5	75.5	63.5	66.5	47.5	54.5	35.0	30.5	..... 30
31.....	12.0	....	56.0	....	76.0	....	64.5	68.0	....	45.5	....	39.5	..... 31
Monthly Mean.	14.2	29.6	43.1	48.6	65.0	67.2	70.4	75.1	57.4	55.5	41.9	37.8	
31 yr. Average	27.2	26.3	37.0	48.3	58.6	67.2	71.3	69.7	63.6	51.3	40.1	30.2	

TABLE III.—MONTHLY MEAN TEMPERATURE FOR 31 YEARS
AT WOOSTER—Degrees

Date	January	February	March	April	May	June	July	August	September	October	November	December	Year	Date
1888.....	23.0	28.8	31.7	46.3	57.7	69.8	70.1	67.8	57.1	44.9	40.7	31.4	47.4	1888
1889.....	31.1	22.9	38.7	47.1	57.8	64.5	70.0	66.0	60.8	45.3	39.3	40.7	48.6	1889
1890.....	36.0	36.6	30.9	48.4	56.0	69.8	70.5	65.8	59.6	50.0	31.3	28.8	49.7	1790
1891.....	30.0	34.0	32.0	49.0	52.0	68.0	68.0	71.0	68.0	49.0	38.0	37.0	49.0	1891
1892.....	22.0	33.0	33.0	47.0	47.0	70.0	70.0	69.0	61.0	49.0	38.0	28.0	48.0	1892
1893.....	18.0	28.0	38.8	50.1	57.6	69.3	72.0	67.9	63.2	52.3	37.7	30.9	48.7	1893
1894.....	32.8	26.7	43.5	50.5	57.5	67.9	71.4	69.2	66.1	52.3	36.5	32.9	50.6	1894
1895.....	21.9	17.9	32.4	49.5	59.4	69.9	68.6	70.9	66.5	44.2	40.4	32.8	47.8	1895
1896.....	27.9	29.2	29.8	54.6	64.5	65.6	70.2	68.5	60.6	45.8	44.4	30.6	49.3	1896
1897.....	24.0	30.0	39.3	47.2	53.4	64.3	73.2	67.0	66.7	55.9	40.7	31.8	49.4	1897
1898.....	31.6	27.2	43.3	45.3	58.2	68.7	74.5	71.1	66.2	52.6	38.4	27.9	50.4	1898
1899.....	26.6	21.3	35.0	52.1	60.0	69.4	70.0	71.0	61.6	55.0	43.2	29.0	49.5	1899
1900.....	30.2	25.0	31.8	47.8	61.5	68.5	72.6	74.1	67.1	58.9	40.6	30.7	50.7	1900
1901.....	28.3	20.0	39.1	45.2	57.9	69.1	75.9	71.6	63.3	51.7	36.6	26.1	48.7	1901
1902.....	26.3	21.4	41.2	46.2	61.2	65.6	73.0	66.4	62.7	53.9	47.3	28.7	49.5	1902
1903.....	24.4	29.0	45.7	48.0	62.2	63.0	71.8	68.8	64.4	58.2	36.8	27.7	49.1	1903
1904.....	18.6	20.5	37.6	42.8	59.4	67.0	69.8	66.7	64.2	50.4	39.6	28.1	47.1	1904
1905.....	22.6	19.8	41.2	46.8	59.2	68.0	71.6	70.0	63.8	51.0	38.3	33.1	48.8	1905
1906.....	35.9	25.8	30.2	51.9	59.9	68.8	71.0	74.2	67.7	51.4	40.4	31.2	50.7	1906
1907.....	30.8	24.6	44.9	41.7	52.8	64.6	69.9	68.6	65.0	47.4	38.5	32.1	48.4	1907
1908.....	28.7	26.8	43.1	50.1	62.2	68.1	72.4	69.0	66.4	53.0	41.0	31.7	51.0	1908
1909.....	31.7	33.6	35.9	48.4	57.9	69.3	69.6	70.4	62.2	47.8	48.3	25.2	50.0	1909
1910.....	26.7	23.8	47.2	50.2	54.7	64.3	72.6	70.9	65.3	54.9	34.8	24.4	49.2	1910
1911.....	31.3	33.8	35.0	46.5	63.5	68.9	71.7	70.6	65.2	51.8	36.7	34.7	50.8	1911
1912.....	16.6	20.5	30.3	50.5	61.1	64.6	71.5	67.1	65.6	52.4	41.0	33.1	47.8	1912
1913.....	34.2	25.1	38.5	48.9	58.0	67.4	72.4	71.5	62.5	52.2	42.4	33.7	50.6	1913
1914.....	31.9	20.4	34.5	48.4	59.8	68.4	71.0	71.5	62.2	55.8	40.9	25.9	49.2	1914
1915.....	24.4	33.2	31.2	53.2	55.0	64.8	69.2	66.1	65.6	53.4	42.4	28.6	48.9	1915
1916.....	35.3	24.7	32.0	46.8	60.2	62.9	74.6	72.2	62.1	50.1	40.4	26.2	48.9	1916
1917.....	25.6	27.3	36.3	46.7	52.7	66.3	71.8	70.7	60.1	45.4	36.5	20.7	46.3	1917
1918.....	14.2	29.6	43.1	48.6	65.0	67.2	70.4	75.1	57.4	55.5	41.9	37.8	50.5	1918
Average...	27.2	26.3	37.0	48.3	58.6	67.2	71.3	69.7	63.6	51.3	40.1	30.2	49.2	

TABLE IV.—MONTHLY RAINFALL FOR 31 YEARS AT WOOSTER
—INCHES

Date	January	February	March	April	May	June	July	August	September	October	November	December	Annual	Date
1888.....	3.34	2.43	3.34	2.48	3.82	2.31	4.54	4.35	1.92	3.18	4.95	1.39	38.05	1888
1889.....	4.33	2.42	2.13	1.58	2.97	4.86	6.73	1.98	4.05	1.36	3.53	3.93	39.87	1889
1890.....	4.71	6.20	4.37	3.10	6.37	6.92	2.67	4.65	5.13	7.45	2.62	1.74	53.94	1890
1891.....	2.91	4.83	3.71	1.66	2.24	7.13	3.24	1.85	.93	1.33	5.73	2.92	38.48	1891
1892.....	2.67	2.67	3.38	2.44	7.69	7.89	4.73	2.69	3.20	.37	2.06	2.74	41.53	1892
1893.....	4.01	6.33	1.89	5.66	6.28	2.51	1.38	1.53	1.85	5.15	2.49	1.50	40.58	1893
1894.....	2.19	3.37	2.36	1.74	4.41	2.23	1.38	.76	4.25	2.53	2.41	3.15	30.78	1894
1895.....	3.97	.41	1.98	1.69	1.38	4.20	2.19	2.30	3.92	1.15	4.21	3.51	30.91	1895
1896.....	1.73	2.27	3.67	3.34	3.41	3.98	8.15	1.96	5.16	.71	1.78	3.04	39.10	1896
1897.....	3.42	2.64	2.81	2.75	4.97	2.98	3.89	3.86	.29	.89	5.76	2.50	36.76	1897
1898.....	4.10	2.27	6.44	2.56	4.60	2.70	6.79	5.53	2.15	4.28	4.14	2.29	47.85	1898
1899.....	3.29	1.64	3.95	1.28	4.42	1.95	3.73	.53	5.56	2.21	1.59	2.78	32.93	1899
1900.....	2.78	2.74	2.25	1.70	2.23	3.71	5.65	5.97	2.19	2.10	4.30	.99	36.61	1900
1901.....	1.58	1.20	3.09	2.46	4.32	4.82	3.32	3.58	5.64	.79	1.62	3.47	35.89	1901
1902.....	.63	.83	2.99	1.55	2.57	5.55	5.26	1.87	3.49	1.52	2.62	4.07	32.95	1902
1903.....	3.54	3.69	3.29	4.55	1.59	3.69	4.61	6.58	2.07	2.63	2.25	1.95	40.44	1903
1904.....	5.27	3.90	6.22	6.59	4.45	1.67	4.93	2.03	2.27	.87	.40	2.68	41.28	1904
1905.....	1.83	1.36	2.61	2.51	5.97	7.50	5.14	4.47	5.10	2.32	2.04	2.08	42.93	1905
1906.....	1.93	1.06	3.57	2.27	2.98	3.81	4.93	7.38	5.16	3.55	2.39	3.79	42.82	1906
1907.....	6.92	1.09	5.80	2.69	3.48	3.81	3.96	2.04	3.13	2.34	1.33	3.41	40.00	1907
1908.....	1.96	3.89	5.02	3.64	4.56	2.17	3.44	3.17	.73	1.22	1.09	3.05	33.94	1908
1909.....	2.95	5.22	3.02	3.92	4.06	6.44	4.05	5.21	1.73	2.16	2.91	2.55	44.22	1909
1910.....	5.29	4.41	.54	3.22	4.87	2.57	1.12	.95	2.59	5.24	2.36	2.29	35.45	1910
1911.....	4.13	2.25	3.26	3.71	2.45	3.78	3.36	5.19	6.53	5.45	2.50	4.54	47.15	1911
1912.....	2.30	1.58	3.77	5.58	5.65	2.21	7.46	7.32	4.41	2.18	1.79	2.35	46.70	1912
1913.....	7.86	2.43	11.84	3.66	3.04	.97	4.07	4.75	3.70	3.17	3.77	1.92	51.18	1913
1914.....	1.64	1.95	2.37	4.33	2.98	6.33	1.23	5.00	2.87	3.33	1.68	3.67	37.38	1914
1915.....	2.32	2.04	1.17	1.41	2.80	6.32	8.35	3.93	4.90	2.85	2.65	3.32	42.05	1915
1916.....	4.98	1.73	4.72	2.92	2.95	5.05	2.21	2.26	1.07	2.03	2.58	2.43	34.93	1916
1917.....	3.12	1.30	3.66	2.00	3.94	4.84	2.20	2.44	1.48	4.76	.44	1.64	31.82	1917
1918.....	2.66	2.39	2.01	2.96	4.88	1.91	2.68	3.03	3.27	2.82	1.43	3.71	33.75	1918
Average	3.37	2.66	3.59	2.97	3.95	4.09	4.11	3.52	3.25	2.64	2.63	2.75	39.43	

TABLE V.—MONTHLY MEAN TEMPERATURE FOR 31 YEARS FOR THE STATE—DEGREES

Date	January	February	March	April	May	June	July	August	September	October	November	December	Year	Date
1888....	24.3	30.5	34.2	49.2	58.8	70.4	72.1	70.4	60.3	47.9	42.9	33.3	49.5	1888
1889.....	33.3	25.8	40.2	49.9	60.2	66.7	72.5	69.1	62.9	47.9	41.0	43.8	51.1	1889
1890.....	38.8	39.4	34.5	51.3	59.2	73.3	73.0	69.8	62.1	52.7	42.2	31.2	52.2	1890
1891.....	33.0	36.0	35.0	52.0	58.0	71.0	69.0	70.0	67.0	51.0	40.0	39.0	51.8	1891
1892.....	24.0	35.0	35.0	49.0	56.0	73.0	73.0	71.0	64.0	52.0	38.0	29.0	50.2	1892
1893.....	18.0	29.0	38.0	50.2	58.3	70.6	74.5	70.7	65.2	53.7	39.3	32.7	50.0	1893
1894.....	33.7	28.9	45.1	50.6	60.0	71.3	74.3	71.2	67.8	53.9	37.5	33.9	52.4	1894
1895.....	23.4	19.6	35.5	51.7	61.1	72.0	71.6	73.5	66.0	46.9	41.9	33.9	50.0	1895
1896.....	29.4	30.5	32.4	56.9	67.9	69.5	73.2	71.8	62.7	49.0	45.1	32.9	51.8	1896
1897.....	25.5	32.4	41.5	49.3	56.3	68.1	75.5	69.4	66.9	58.1	42.2	32.8	51.5	1897
1898.....	32.4	30.0	45.0	47.2	61.0	71.9	76.0	73.5	67.8	54.1	38.8	28.8	52.2	1898
1899.....	27.8	21.6	36.9	53.3	63.3	71.5	74.1	73.7	64.1	57.4	43.9	30.2	51.5	1899
1900.....	31.1	26.0	32.9	50.1	62.9	69.8	74.1	76.3	69.3	60.5	41.6	31.6	52.2	1900
1901.....	29.2	21.1	39.5	46.7	59.0	70.9	78.1	73.1	64.8	53.8	37.7	27.9	50.2	1901
1902.....	27.3	23.3	41.9	48.2	62.6	66.9	74.0	68.9	63.6	54.6	48.5	29.4	50.7	1902
1904.....	27.1	29.9	46.7	49.9	63.9	64.4	72.9	70.7	65.6	54.0	37.2	23.4	50.5	1903
1904.....	20.7	22.9	39.7	44.4	60.7	68.4	71.4	68.8	65.5	52.2	40.5	28.0	48.6	1904
1905.....	22.7	20.8	42.7	48.5	60.7	69.2	73.0	71.7	65.3	52.6	39.6	32.9	50.0	1905
1906.....	35.7	27.3	31.3	52.1	61.3	69.8	72.1	74.6	68.9	52.7	41.1	32.3	51.6	1906
1907.....	32.2	26.0	45.9	42.5	54.5	65.6	72.6	69.5	65.5	48.8	39.1	33.0	49.6	1907
1908.....	29.1	27.7	43.4	51.0	62.8	69.2	73.9	71.2	68.0	54.1	41.7	33.1	52.1	1908
1909.....	32.2	34.7	37.3	49.1	58.7	70.1	70.7	71.9	63.2	48.8	48.9	25.4	50.9	1909
1910.....	27.6	25.5	48.2	51.5	56.0	65.9	73.8	71.4	66.3	56.7	36.3	25.5	50.4	1910
1911.....	32.8	34.5	37.4	47.7	66.3	70.9	74.0	72.5	67.5	53.3	37.6	36.3	52.6	1911
1912.....	17.9	22.4	32.9	51.9	62.5	66.6	73.4	69.2	67.4	54.8	42.2	33.8	49.6	1912
1913.....	36.0	26.7	40.1	50.0	60.3	69.8	74.5	73.3	64.1	54.1	44.4	34.5	52.3	1913
1914.....	33.4	22.1	36.0	50.1	62.2	71.1	74.0	72.8	63.4	56.9	42.1	27.0	50.9	1914
1915.....	26.3	35.2	33.2	54.8	57.8	66.8	71.5	67.5	67.0	55.4	44.3	30.4	50.8	1915
1916.....	35.5	26.5	34.7	49.3	61.8	64.7	76.9	74.4	63.7	53.2	42.6	29.1	51.0	1916
1917.....	28.0	25.4	39.6	48.7	54.1	66.9	72.3	71.3	61.9	46.7	38.7	21.4	47.9	1917
1918.....	14.9	31.0	44.0	48.7	66.4	68.8	71.3	76.6	58.4	56.6	42.3	39.3	51.5	1918
Average.	28.5	28.0	38.7	49.9	60.5	69.2	73.3	71.4	65.0	53.0	41.3	31.5	50.9	

TABLE VI.—MONTHLY RAINFALL FOR 31 YEARS FOR THE STATE—
Inches

Date	January	February	March	April	May	June	July	August	September	October	November	December	Year	Date
1888.....	3.65	1.74	3.55	1.99	3.77	3.41	4.40	5.16	2.27	3.98	4.25	1.47	39.64	1888
1889.....	3.13	1.35	1.38	1.79	3.71	4.13	4.19	1.50	3.62	1.78	4.02	2.81	33.41	1889
1890.....	4.94	5.25	5.29	3.45	5.52	4.50	1.99	4.66	5.56	4.27	2.53	2.37	50.33	1890
1891.....	2.82	4.91	4.19	2.13	2.20	4.82	3.82	3.07	1.50	1.76	5.00	2.39	38.61	1891
1892.....	2.11	3.03	2.86	3.32	6.32	5.61	3.80	2.99	2.36	.73	2.32	1.71	37.16	1892
1893.....	2.56	5.13	2.09	6.37	4.67	3.34	2.49	2.17	1.57	4.24	2.09	2.61	39.63	1893
1894.....	2.14	2.79	2.16	2.31	4.00	2.65	1.56	1.67	3.31	2.01	2.17	2.98	29.75	1894
1895.....	4.00	.69	1.59	2.11	1.80	2.47	2.00	2.96	1.66	1.22	4.11	3.85	28.46	1895
1896.....	1.67	2.21	3.34	2.78	2.67	4.81	8.11	3.38	5.13	1.20	2.63	1.65	39.58	1896
1897.....	1.93	3.64	5.17	3.27	3.63	2.85	4.65	2.72	.78	.64	6.62	2.39	38.59	1897
1898.. ...	5.25	2.32	6.23	2.38	4.10	2.86	3.98	4.58	2.56	3.72	3.17	2.71	43.78	1898
1899.....	3.01	2.11	4.64	1.61	4.32	2.94	4.17	1.82	2.68	2.14	1.72	3.16	34.32	1899
1900.....	2.37	3.46	2.35	1.89	2.40	3.01	4.62	3.68	1.76	1.89	4.15	1.24	32.82	1900
1901.....	1.70	1.24	2.66	3.40	3.96	4.44	2.72	3.33	2.86	.73	1.53	3.79	32.36	1901
1902.....	1.42	.88	2.76	2.21	3.09	7.48	4.69	1.67	4.55	2.28	2.60	3.95	37.58	1902
1903.....	2.36	4.95	3.51	4.01	2.82	4.02	3.67	3.20	1.52	2.62	2.10	2.07	36.85	1903
1904.....	3.85	2.69	5.67	3.53	3.79	2.88	4.13	2.74	1.95	1.50	.37	3.09	36.19	1904
1905.....	1.73	1.58	2.50	3.10	5.63	4.72	3.93	4.46	2.86	3.65	2.63	2.29	39.08	1905
1906.....	1.98	1.16	3.97	1.89	2.17	3.42	5.14	4.77	2.92	3.19	2.59	3.68	36.88	1906
1907.....	6.06	.85	5.55	2.74	3.47	4.57	5.36	2.48	3.92	2.76	1.93	3.16	42.85	1907
1908.....	1.82	4.10	5.43	3.71	4.72	2.51	4.08	2.59	.58	1.17	1.06	2.33	34.10	1908
1909.....	3.24	5.39	2.77	4.13	4.72	5.86	3.76	3.56	1.78	2.31	2.52	2.62	42.66	1909
1910.....	4.48	4.05	.26	3.49	3.80	2.66	3.17	1.58	4.05	4.19	1.89	2.41	36.03	1910
1911.....	3.90	1.95	2.33	4.35	1.69	3.92	2.40	5.39	4.87	4.99	2.91	3.93	42.63	1911
1912.....	2.12	2.08	4.17	4.47	3.12	3.17	5.70	4.08	3.11	2.44	1.10	2.26	37.82	1912
1913.....	7.01	1.94	8.40	3.35	3.53	1.87	5.20	2.52	2.37	3.36	3.52	1.68	44.75	1913
1914.....	2.30	3.04	2.42	4.01	3.11	3.14	2.19	5.08	1.41	3.42	1.53	3.77	35.42	1914
1915.....	3.40	1.96	1.44	1.42	3.99	4.36	6.32	4.52	4.51	2.39	2.68	3.84	40.83	1915
1916.....	5.07	1.83	4.15	2.35	4.27	4.86	1.92	3.11	2.56	2.12	2.11	2.89	37.24	1916
1917.....	3.78	1.43	3.65	3.38	4.18	4.99	3.88	2.70	1.86	4.81	0.54	1.31	36.51	1917
1918.....	3.23	2.16	2.49	3.23	4.49	2.68	2.61	3.64	3.75	2.71	2.02	3.53	36.54	1918
Average.	3.19	2.64	3.52	3.04	3.73	3.84	3.89	3.28	2.78	2.59	2.59	2.71	37.82	

TABLE VII.—Mean temperature and rainfall at the Experiment Station and the State, in 1918, and for 31 years.

	January	February	March	April	May	June	July	August	September	October	November	December	Year
Mean temperature at the Station, 1918.....degrees..	14.2	29.6	43.1	48.6	65.0	67.2	70.4	75.1	57.4	55.5	41.9	37.8	50.5
Thirty-one year average temperature at the Station.. do ..	27.2	26.3	37.0	48.3	58.6	67.2	71.3	69.7	63.6	51.3	40.1	30.2	49.2
Mean temperature for the State, 1918..... do ..	14.9	31.0	44.0	48.7	66.4	68.8	71.3	76.6	58.4	56.6	42.3	39.3	51.5
Thirty-one year average temperature for the State.... do ..	28.5	28.0	38.7	49.9	60.5	69.2	73.3	71.4	65.0	53.0	41.3	31.5	50.9
Rainfall at the Station, 1918.....inches..	2.66	2.39	2.01	2.96	4.88	1.91	2.68	3.03	3.27	2.82	1.43	3.71	33.75
Thirty-one year average rainfall at the Station..... do ..	3.37	2.66	3.59	2.97	3.95	4.09	4.11	3.52	3.25	2.64	2.63	2.75	39.43
Rainfall for the State, 1918..... do ..	3.23	2.16	2.49	3.23	4.49	2.68	2.61	3.64	3.75	2.71	2.02	3.53	36.54
Thirty-one year average rainfall for the State..... do ..	3.19	2.64	3.52	3.04	3.75	3.84	3.89	3.28	2.78	2.59	2.59	2.71	37.82

TABLE VIII.—SUMMARY OF METEOROLOGICAL DATA BY MONTHS FOR 1918

Month	Temperature—degrees											Number of days				Precipitation—_inches			Prevail- ing wind
	Mean	Highest	Date	Lowest	Date	Range	Mean Daily Range	Greatest Daily Range	Date	Least Daily Range	Date	Clear	Partly Cloudy	Cloudy	Rain .01 inch or more	Monthly rainfall	Average daily rainfall	Monthly snowfall	
At the Station																			
January.....	14.2	41	7	—19	20	60	18.9	46	12	5	*2	5	6	20	10	2.66	.086	21.50	S. W.
February.....	29.6	63	14	—18	5	81	23.2	45	20	8	28	7	3	18	12	2.39	.085	0.75	S. W.
March.....	43.1	76	*20	17	*10	59	28.0	46	20	9	1	18	4	9	9	2.01	.065	1.50	S. W.
April.....	48.6	78	2	22	5	96	21.2	37	3	6	1	8	4	18	14	2.96	.099	4.00	S. W.
May.....	65.0	89	*27	31	2	58	24.2	39	24	12	23	17	10	4	17	4.88	.157	.....	S. W.
June.....	67.2	89	1	40	24	49	25.5	42	24	14	*6	19	5	6	8	1.91	.064	.....	S. W.
July.....	70.4	95	21	42	2	53	26.7	45	20	13	30	20	9	2	8	2.68	.086	.....	N. W.
August.....	75.1	105	6	45	1	60	25.9	38	*1	14	31	18	10	3	10	3.03	.098	.....	S. W.
September.....	57.4	81	2	33	22	48	23.9	35	14	12	21	14	3	13	10	3.27	.109	.....	N. W.
October.....	55.5	79	*2	27	1	52	24.6	44	16	5	30	17	7	7	11	2.82	.091	.....	S. E.
November.....	41.9	68	7	19	27	49	17.1	33	7	0	30	8	6	16	8	1.43	.048	T	S. W.
December.....	37.8	61	8	20	*26	41	14.7	29	18	3	27	5	5	21	13	3.71	.120	1.25	S. W.
Total or average }	50.5	105	Aug. 6	—19	Jan. 20	124	22.8	47	Oct. 16	0	Nov. 30	156	72	137	130	33.75	.092	29.00	S. W.
For the State																			
January.....	14.9	49	*6	—28	20	77	.....	56	21	.....	.....	9	7	15	13	3.23	.104	23.4	S. W.
February.....	31.0	78	23	—24	5	102	.....	55	6	.....	.....	9	10	8	9	2.16	.077	1.2	S. W.
March.....	44.0	82	*9	5	11	77	.....	55	*29	.....	.....	7	18	6	7	2.49	.080	0.6	S. W.
April.....	48.7	83	2	18	5	65	.....	47	15	.....	.....	13	8	8	13	3.23	.108	3.7	N. E.
May.....	66.4	98	26	26	2	72	.....	47	5	.....	.....	12	14	11	12	4.49	.145	T	S. W.
June.....	68.8	98	17	33	23	65	.....	51	24	.....	.....	8	15	10	8	2.68	.089	.....	S. W.
July.....	71.3	101	21	38	*2	63	.....	51	20	.....	.....	8	14	11	8	2.61	.084	.....	S. W.
August.....	76.6	110	6	41	3	69	.....	49	16	.....	.....	9	14	11	9	3.64	.118	.....	S. W.
September.....	58.4	89	*4	27	22	62	.....	51	30	.....	.....	9	13	8	9	3.75	.125	.....	N. W.
October.....	56.6	89	*3	22	22	67	.....	57	9	.....	.....	9	13	8	9	2.71	.087	T	S. W.
November.....	42.3	75	*6	12	26	63	.....	51	14	.....	.....	8	12	5	8	2.02	.067	0.1	S. W.
December.....	39.3	72	10	12	30	60	.....	39	19	.....	.....	12	7	6	12	3.53	.114	1.2	S. W.
Total or average }	51.5	110	Aug. 6	—28	Jan. 20	138	.....	57	Oct. 9	.....	.....	113	147	99	117	36.5	.100	30.2	S. W.

TABLE IX.—SUMMARY OF METEOROLOGICAL DATA FOR 1914-1918 AND FOR ENTIRE PERIOD*

	1914	1915	1916	1917	1918	Summary for period
At Experiment Station.						
Mean temperature.....degrees..	49.2	48.9	48.9	46.3	50.8	49.2
Highest temperature.....do..	95 June 24	91 July 16	99 Aug. 21	96 July 31	105 Aug. 6	105 Aug. 6, 1918
Lowest temperature.....do..	-18 Feb. 25	-13 Jan. 24	-7 Feb. 22	-19 Dec. 30	-19 Jan. 20	-24 Jan. 13, 1912
Range of temperature.....do..	113	104	106	115	124	129
Mean daily range of temperature.....do..	22.0	20.8	23.5	22.0	22.8	21.2
Greatest daily range of temperature.....do..	51 Feb. 25	42 April 8	50 Oct. 4	44 April 11	47 Oct. 16	55 Oct. 6, 1895
Least daily range of temperature.....do..	2 Jan. 4	2 Jan. 12	0 Dec. 22	1 Feb. 1	0 Nov. 30	0 Dec. 22, 1916
Number of clear days.....	155	132	150	126	156	134
Number of partly cloudy days.....	59	72	74	75	72	88
Number of cloudy days.....	151	161	142	164	137	143
Number of days rain fell.....	114	132	141	134	130	130
Total yearly rainfall.....inches..	37.38	42.06	34.93	31.82	33.75	39.43
Greatest monthly rainfall.....do..	6.33 June	8.35	5.25 June	4.84 June	4.88 May	11.84 March '13
Least monthly rainfall.....do..	1.23 July	1.17 March	1.07 Sept.	.44 Nov.	1.43 Nov.	.29 Sept. '97
Prevailing direction of wind.....do..	S. W.	S. W.	S. W.	S. W.	S. W.	S. W.
For the State.						
Mean temperature.....degrees..	50.9	50.8	51.0	47.9	51.5	50.8
Highest temperature.....do..	106 July 12	99 July 31	104 Aug. 21	103 July 31	110 Aug. 6	113 July 4, '97
Lowest temperature.....do..	-24 Feb. 25	-22 Jan. 24	-18 Feb. 14	-31 Dec. 11	-28 Jan. 20	-39 Feb. 10, '99
Range of temperature.....do..	130	121	122	134	138	152
Greatest daily range of temperature.....do..	66 Feb. 25	54 April 8	56 Jan. 13	57 Nov. 10	57 Oct. 9	67 Sept. '97
Average number of days rain fell.....	106	123	119	118	117	120
Mean yearly rainfall.....inches..	35.42	40.83	37.24	36.51	36.54	38.11
Mean daily rainfall.....do..	.097	.111	.101	.099	.100	.104
Prevailing direction of wind.....	S. W.	S; W.	S. W.	S. W.	S. W.	S. W.

*Summary at Experiment Station for 31 years; for State 36 years; for data from 1888-1913 at Experiment Station, and from 1883-1913 for State see Bulletin 277.

TABLE X.—DATE OF FIRST AND LAST KILLING FROST. LENGTH OF GROWING SEASON, AND NUMBER OF TIMES THE MERCURY FELL BELOW ZERO AT THE EXPERIMENT STATION AT WOOSTER SINCE 1894.

Year	Date of killing frosts		Length of growing season	January	February	March	December	Total
	Last in spring	First in Autumn	Number of days					
1894.....	April 13	Oct. 7	177	.....	1	.....	2	3
1895.....	May 22	Sept. 28	129	5	5	.....	2	12
1896.....	April 24	Sept. 24	153	1	3	.....	.....	4
1897.....	May 26	Sept. 21	118	4	.....	.....	.....	4
1898.....	May 9	Oct. 16	160	1	2	.....	.....	3
1899.....	May 22	Sept. 30	131	2	8	.....	2	12
1900.....	May 10	Oct. 18	161	2	4	1	.....	7
1901.....	May 16	Oct. 2	139	2	.....	1	4	7
1902.....	April 28	Sept. 16	141	.....	4	.....	1	5
1903.....	May 4	Oct. 23	173	3	3	.....	4	10
1904.....	April 20	Sept. 22	155	7	8	.....	1	16
1905.....	May 24	Oct. 13	142	2	9	.....	.....	11
1906.....	May 10	Oct. 11	154	.....	6	1	.....	7
1907.....	May 12	Oct. 14	155	5	3	.....	.....	8
1908.....	April 17	Sept. 30	166	.....	1	.....	.....	1
1909.....	May 12	Oct. 19	160	1	1	.....	1	3
1910.....	May 15	Oct. 29	167	2	5	.....	.....	7
1911.....	May 5	Oct. 24	172	1	.....	.....	.....	1
1912.....	June 8	Sept. 30	114	11	7	.....	.....	18
1913.....	June 10	Sept. 23	105	.....	1	.....	.....	1
1914.....	May 2	Oct. 27	164	.....	6	.....	4	10
1915.....	May 27	Oct. 10	136	4	.....	.....	.....	4
1916.....	April 28	Sept. 19	154	2	1	1	5	9
1917.....	May 11	Oct. 1	144	2	8	.....	9	19
1918.....	May 2	Oct. 1	152	8	4	.....	.....	12
Total or average..	May 10	Oct. 6	149	65	90	4	35	194

TABLE XI.—MONTHLY MAXIMUM AND MINIMUM TEMPERATURE FOR 31 YEARS AT WOOSTER—Degrees

Date	January		February		March		April		May		June		July		August		September		October		November		December	
	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest
1888.....	54	— 5	54	— 1	67	8	84	19	82	31	89	40	90	43	92	41	82	31	69	27	72	19	57	9
1889.....	54	12	54	— 5	71	16	80	21	90	30	87	38	92	49	90	45	92	37	76	23	65	16	65	18
1890.....	66	5	65	14	60	1	74	23	83	30	88	46	94	45	95	40	88	38	81	30	66	24	48	15
1891.....	51	12	60	3	61	0	83	21	82	28	89	44	89	49	99	53	98	42	88	25	71	10	58	16
1892.....	54	—20	54	6	65	10	76	28	86	38	90	56	98	48	92	49	88	36	81	25	67	16	61	— 2
1893.....	51	— 9	47	— 2	75	10	83	24	84	36	92	45	95	47	93	37	95	28	85	24	66	15	62	6
1894.....	56	1	64	— 1	75	14	92	24	83	35	93	37	98	41	96	41	93	36	80	28	65	31	57	— 7
1895.....	54	— 6	60	— 6	59	9	80	21	94	27	98	35	92	42	94	42	93	34	73	19	72	18	61	— 2
1896.....	53	— 2	58	— 6	65	4	89	19	86	44	87	39	92	45	93	41	92	34	71	21	69	13	56	1
1897.....	61	—18	54	0	69	11	79	21	78	31	88	37	96	50	92	42	96	28	86	25	65	12	60	2
1898.....	64	— 1	64	— 9	71	12	77	16	81	32	90	40	96	45	90	46	90	38	86	24	66	13	56	1
1899.....	55	— 6	57	—21	67	9	86	21	86	30	92	40	94	45	95	39	94	32	92	22	66	22	63	— 2
1900.....	54	— 5	65	—10	57	4	78	20	89	25	90	44	95	44	94	49	89	41	86	30	69	6	55	11
1901.....	53	— 4	40	0	69	— 1	82	22	82	23	91	38	95	50	94	47	86	34	79	26	67	18	64	—11
1902.....	47	2	59	— 9	69	9	83	24	97	29	89	39	93	46	88	40	85	32	77	27	72	24	60	— 5
1903.....	60	— 8	63	— 9	76	21	74	19	89	27	88	41	94	42	92	43	89	32	79	26	71	9	49	— 2
1904.....	60	—21	57	—10	74	13	72	12	88	33	88	44	92	46	90	42	89	31	83	19	68	15	63	— 1
1905.....	59	— 8	43	—12	79	10	77	23	82	31	89	38	92	50	90	46	87	36	80	23	61	16	52	13
1906.....	72	6	65	—14	61	— 5	80	21	86	29	92	47	88	46	91	48	90	44	74	22	72	23	58	6
1907.....	67	—14	50	— 5	82	12	78	15	81	29	89	40	88	40	90	43	88	34	82	22	55	18	56	9
1908.....	51	4	56	— 3	75	21	80	24	89	30	91	36	92	46	95	43	95	28	84	24	68	17	59	7
1909.....	66	—11	60	— 2	60	12	81	13	84	31	89	42	89	45	89	41	90	30	81	22	72	21	66	— 6
1910.....	45	— 1	48	—12	84	18	81	23	82	25	90	35	94	44	94	38	91	34	85	24	66	14	49	0
1911.....	56	—11	62	9	67	4	77	16	92	28	94	46	101	43	97	41	87	37	75	22	65	10	61	7
1912.....	44	—24	55	—16	68	6	78	23	86	36	88	31	90	51	89	41	93	30	82	26	68	18	58	8
1913.....	57	4	62	— 2	74	1	83	20	86	25	96	32	95	42	96	45	93	28	81	24	73	12	56	7
1914.....	64	0	51	—18	67	6	87	19	91	29	95	36	95	45	94	49	93	34	82	26	74	13	59	—11
1915.....	50	—13	60	0	54	8	88	21	78	28	87	37	91	46	88	36	90	33	80	23	74	19	52	10
1916.....	70	— 4	57	— 7	76	— 1	78	21	86	34	84	35	96	50	99	41	94	30	89	26	71	16	61	— 6
1917.....	56	—11	59	—15	72	2	82	20	86	31	92	37	96	46	95	49	85	33	76	24	65	9	48	—19
1918.....	41	—19	63	—18	76	17	78	22	89	31	89	40	95	42	105	45	81	33	79	27	68	19	61	20
Extremes.....	72	—24	65	—21	84	— 5	92	12	97	25	98	31	101	40	105	37	98	28	92	19	73	6	66	—19

TABLE XI.—MONTHLY MAXIMUM AND MINIMUM TEMPERATURE FOR 31 YEARS FOR THE STATE—(Degrees)—Concluded

Date	January		February		March		April		May		June		July		August		September		October		November		December	
	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest
1888.....	68	-15	68	-10	77	-9	92	19	91	23	102	34	97	42	102	35	92	26	80	22	80	17	62	1
1889.....	61	8	70	-14	82	-10	88	15	96	26	92	38	98	46	100	40	98	28	82	17	77	9	62	10
1890.....	75	1	73	5	69	4	86	20	92	28	101	39	101	43	103	40	92	33	85	29	76	17	65	3
1891.....	65	3	80	-1	74	-5	95	15	93	25	98	40	95	41	101	39	99	36	93	20	76	0	66	9
1892.....	61	-27	74	1	80	-6	90	14	99	28	101	47	103	40	99	45	96	34	89	20	76	8	70	-12
1893.....	63	-24	68	-14	87	-8	93	20	94	23	102	40	101	42	101	37	100	24	95	15	76	-2	72	5
1894.....	66	-16	76	-15	91	-3	97	16	98	31	102	29	105	36	104	36	103	27	90	15	79	4	70	-27
1895.....	62	-19	70	-24	86	-7	90	16	102	19	105	29	106	34	102	31	105	25	84	8	85	5	79	-13
1896.....	70	-14	78	-18	73	-7	103	15	99	36	98	33	102	39	102	35	100	25	85	17	79	7	70	-15
1897.....	71	-27	72	-9	82	5	92	11	91	25	102	31	113	44	101	38	105	25	85	17	79	8	67	-15
1898.....	71	-18	72	-20	84	5	87	10	92	29	99	39	105	38	100	40	102	33	96	20	76	8	71	-7
1899.....	66	-15	67	-39	76	0	94	6	96	28	102	36	105	41	104	39	107	26	94	20	79	18	67	-18
1900.....	67	-20	80	-20	70	9	87	15	97	20	96	38	103	38	103	40	100	33	93	23	80	0	65	-2
1901.....	67	-10	60	-20	84	8	91	18	90	26	103	30	109	48	101	42	98	29	88	20	79	10	73	-19
1902.....	63	-11	66	-17	82	4	90	17	98	24	98	33	100	43	97	37	94	24	88	21	87	17	63	-11
1903.....	73	-13	69	-20	85	11	88	10	93	22	95	35	104	42	101	38	98	26	93	15	88	2	57	-11
1904.....	70	-30	75	-18	86	-1	81	7	95	27	98	37	99	41	97	38	99	23	92	15	75	0	69	-16
1905.....	65	-17	54	-22	85	-5	89	12	93	26	99	34	100	44	96	41	95	30	89	20	71	10	58	-2
1906.....	79	-14	72	-23	74	-12	91	18	94	24	100	34	98	43	101	43	98	36	91	18	82	14	68	-15
1907.....	75	-23	66	-19	96	-2	86	10	89	24	96	36	98	37	96	40	93	29	88	19	71	11	69	-2
1908.....	59	-8	66	-22	85	12	91	16	96	25	100	33	102	42	104	37	100	24	90	15	77	5	68	-2
1909.....	74	-17	70	-17	70	6	90	13	91	24	96	36	97	40	96	35	95	25	86	16	80	15	75	-20
1910.....	62	-24	68	-25	90	12	88	19	88	21	97	33	98	43	100	36	93	34	94	18	78	11	63	-10
1911.....	68	-19	76	-2	81	-1	86	8	101	25	101	40	107	41	104	34	97	33	88	20	79	8	79	-3
1912.....	57	-37	68	-25	80	-3	89	15	91	31	93	28	101	42	95	40	99	29	93	23	82	3	74	-5
1913.....	70	-3	77	-15	80	-8	90	18	95	23	105	29	103	40	102	39	102	26	96	18	78	2	65	-3
1914.....	75	-17	67	-24	78	-2	91	12	102	26	104	32	106	41	101	41	97	26	91	17	80	5	74	-19
1915.....	64	-22	70	-9	61	-3	96	12	89	27	96	31	99	43	97	34	96	27	89	20	80	11	62	1
1916.....	75	-8	69	-18	87	-10	89	18	95	29	94	31	103	45	104	39	101	27	93	22	80	5	72	-15
1917.....	74	-16	75	-21	84	-9	90	13	93	26	100	33	103	43	101	38	93	28	87	18	80	5	60	-31
1918.....	49	-28	78	-24	82	5	83	18	98	26	98	33	101	38	110	41	89	27	89	22	75	12	72	-12
Extremes.....	79	-37	80	-39	96	-12	103	6	102	19	105	28	113	34	110	31	107	23	97	8	88	-2	79	-31

TABLE XII.—MONTHLY RAINFALL AT DISTRICT AND COUNTY EXPERIMENT FARMS—Inches

Date	January	February	March	April	May	June	July	August	September	October	November	December	Year	Date
Strongsville														
1897.....	0.91	1.62	3.29	3.88	5.99	1.88	5.56	3.25	1.13	0.87	7.02	1.92	37.32	1897
1898.....	5.47	3.75	4.82	2.37	3.43	5.60	4.25	5.69	2.72	5.59	3.25	7.39	54.33	1898
1899.....	4.35	2.32	5.25	3.11	5.58	2.10	5.75	.61	3.14	2.86	1.55	6.36	42.98	1899
1900.....	3.22	5.53	3.01	2.22	1.85	1.36	4.73	2.49	3.56	2.22	4.91	1.94	37.04	1900
1901.....	2.73	2.20	4.35	4.76	5.14	3.32	3.15	7.46	5.51	.47	2.51	5.34	48.94	1901
1902.....	1.17	1.40	2.64	2.91	4.29	9.34	7.39	4.52	5.58	2.73	2.35	3.34	47.66	1902
1903.....	2.37	2.97	3.18	6.68	1.45	3.78	6.49	8.72	1.88	3.09	2.70	2.62	45.93	1903
1904.....	6.51	3.59	4.68	3.47	6.07	1.45	5.80	3.42	2.73	1.20	.50	3.87	43.35	1904
1905.....	2.48	2.73	3.24	3.97	4.38	2.18	5.04	4.11	3.50	2.95	2.92	1.66	39.16	1905
1906.....	2.03	2.06	.....	1.93	1.01	4.67	2.72	4.30	6.70	.....	4.77	5.12	.....	1906
1907.....	5.21	1.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1907
1908.....	.....	.....	.....	.....	2.82	2.17	3.70	3.10	1.00	1.60	1.08	1.90	.....	1908
1909.....	2.48	2.56	.....	3.49	4.13	3.20	4.40	3.60	2.71	2.60	2.80	1.30	.....	1909
1910.....	4.80	2.21	1.10	.....	3.05	2.50	1.00	1.37	4.85	3.90	3.98	2.99	.....	1910
1911.....	.....	1.16	1.85	3.03	1.95	1.80	.80	3.28	5.33	3.85	.....	1.51	.....	1911
1912.....	1.38	1.49	2.91	5.12	3.62	1.80	6.88	4.74	4.34	2.40	.20	1.89	36.77	1912
1913.....	4.50	1.45	9.30	2.08	2.15	1.30	2.60	1.70	3.30	3.59	2.61	1.13	35.71	1913
1914.....	2.00	1.90	2.40	4.95	5.30	3.40	2.00	5.32	.40	.....	.....	.....	.....	1914
1915.....	1.79	1.45	.....	.....	2.25	3.46	3.86	2.47	3.86	.95	1.41	1.52	.....	1915
1916.....	3.10	.48	1.26	2.22	2.72	5.02	1.20	1.24	3.60	2.37	2.01	1.19	26.41	1916
1917.....	1.92	1.40	2.88	3.42	4.83	2.64	2.32	2.24	2.11	4.21	.87	1.47	30.31	1917
1918.....	1.64	1.04	1.35	2.24	4.87	4.03	2.17	1.41	4.16	1.85	.....	.....	.....	1918
Average.....	3.00	2.12	3.38	3.44	3.66	3.19	3.89	3.57	3.43	2.59	2.64	2.87	40.45	

TABLE XII.—MONTHLY RAINFALL AT DISTRICT AND COUNTY EXPERIMENT FARMS—Inches

Date	January	February	March	April	May	June	July	August	September	October	November	December	Year	Date
Germantown														
1905.....	2.92	1.07	6.93	3.45	7.70	3.00	3.80	7.90	3.56	4.10	2.24	2.28	.....	1905
1906.....	2.22	1.32	6.25	2.26	3.20	3.65	4.10	1.93	5.64	2.92	3.25	3.22	42.79	1906
1907.....	2.11	6.33	4.24	4.53	4.47	1.42	3.86	1.36	.35	.27	1.70	1.31	31.95	1907
1908.....	3.41	7.67	2.07	5.58	6.98	5.93	4.50	3.34	.89	3.13	1.95	4.00	49.45	1908
1909.....	3.00	4.25	.10	1.87	5.08	1.58	3.95	1.11	3.96	7.60	.96	2.85	36.41	1909
1910.....	5.00	1.46	3.00	6.01	1.36	2.67	1.78	4.56	5.16	4.48	3.06	3.81	42.35	1910
1911.....	3.23	1.68	4.29	6.51	3.49	2.24	3.78	9.05	2.50	2.79	.72	3.30	43.58	1911
1912.....	8.40	2.05	7.32	5.25	2.62	2.40	3.49	2.23	2.33	2.56	4.80	.88	44.33	1912
1913.....	2.62	3.75	3.05	2.47	1.43	2.63	2.51	6.21	.18	2.19	2.03	2.72	31.79	1913
1914.....	2.95	1.75	1.34	1.54	5.58	3.01	5.38	7.40	5.62	2.12	2.32	3.53	42.54	1914
1915.....	6.34	1.41	3.20	2.13	3.58	5.22	1.76	3.06	2.78	1.91	1.91	2.80	36.10	1915
1916.....	4.15	1.56	4.31	3.27	4.11	4.37	3.43	3.56	1.82	3.77	.50	1.95	36.80	1916
1917.....	4.07	2.14	1.71	3.51	4.18	3.51	1.94	6.31	4.60	1.85	1.66	3.32	38.80	1917
1918.....														1918
Average.....	4.26	2.73	3.68	3.59	3.94	3.18	3.61	4.68	2.98	2.95	2.21	2.88	40.06	
Carpenter														
1903.....	3.74	2.89	5.07	3.75	5.69	5.07	4.23	1.02	1.02	2.60	2.73	3.28	.....	1903
1904.....	1.02	1.35	4.07	3.03	2.69	3.16	3.79	2.71	2.08	1.10	.18	3.40	33.84	1904
1905.....	3.58	1.85	3.82	1.43	1.40	5.11	3.77	4.11	1.02	5.20	2.45	3.51	41.33	1905
1906.....	8.94	2.28	6.13	3.57	3.47	4.49	1.40	2.92	3.24	2.58	3.50	3.50	35.61	1906
1907.....	1.37	4.31	7.80	5.15	3.35	4.49	4.84	4.10	2.94	2.38	2.14	1.72	47.00	1907
1908.....	3.05	5.72	2.77	4.10	4.29	7.63	4.18	3.50	.48	.85	1.37	2.13	37.98	1908
1909.....	6.40	4.70	.20	3.23	2.91	2.35	3.40	2.18	.86	2.12	.90	2.05	39.85	1909
1910.....	5.56	3.08	2.26	3.90	2.06	6.14	1.19	4.69	5.18	3.68	2.20	4.01	43.95	1910
1911.....	1.48	2.44	3.39	4.04	2.90	2.92	5.46	2.56	2.51	1.80	.38	2.09	31.97	1911
1912.....	6.78	1.98	1.71	2.74	4.23	2.29	2.64	2.38	2.07	2.89	2.34	2.36	34.41	1912
1913.....	1.17	2.05	1.72	2.84	2.33	2.53	1.23	4.88	1.07	2.98	1.08	4.65	28.53	1913
1914.....	2.91	.95	1.05	1.22	4.95	4.40	3.90	2.76	3.64	1.96	3.35	4.85	35.94	1914
1915.....	4.91	3.33	3.83	1.95	4.72	3.57	2.20	2.95	1.89	2.22	1.46	3.29	36.34	1915
1916.....	5.28	1.37	6.19	3.87	3.61	5.28	5.20	1.58	1.52	4.71	.65	.65	39.91	1916
1917.....	2.37	2.99	4.07	4.54	2.81	4.85	1.48	3.05	1.55	3.23	2.61	4.90	38.45	1917
1918.....														1918
Average.....	3.90	2.75	3.60	3.25	3.65	4.32	3.29	2.94	2.00	2.62	1.79	3.07	37.13	

TABLE XII.—MONTHLY RAINFALL AT DISTRICT AND COUNTY EXPERIMENT FARMS—Inches (Continued)

Date	January	February	March	April	May	June	July	August	September	October	November	December	Year	Date
Marietta														
1916.....	3.24	2.15	2.78	1.80	5.55	4.40	2.12	4.08	2.23	2.74	1.95	3.53	36.57	1916
1917.....	4.50	1.96	4.07	4.55	4.49	6.36	3.91	3.04	1.69	5.50	0.73	0.91	41.71	1917
1918.....	3.15	2.33	3.88	4.84	4.15	1.96	2.75	4.71	2.58	3.81	1.64	4.47	40.27	1918
Average.....	3.63	2.15	3.58	3.73	4.73	4.24	2.93	3.94	2.17	4.02	1.44	2.97	39.52	
Canfield														
1916.....	.....	.....	.....	.....	5.22	5.12	3.45	1.49	2.38	2.19	.....	1.96	.....	1916
1917.....	2.33	1.05	1.91	1.97	2.74	5.41	3.63	2.39	2.19	5.74	0.73	1.23	31.32	1917
1918.....	2.41	1.84	2.26	3.97	5.08	.....	1.93	1.25	3.29	3.26	1.70	2.97	.....	1918
Average.....	2.37	1.44	2.08	2.97	4.35	5.26	3.00	1.71	2.62	3.73	1.21	2.05	.....
Mt. Healthy														
1916.....	5.91	1.76	2.57	2.68	4.01	5.13	1.45	3.29	2.03	1.05	1.78	2.73	34.39	1916
1917.....	5.04	1.61	3.67	4.45	5.13	4.81	4.61	1.41	3.79	4.50	0.36	2.38	41.76	1917
1918.....	3.98	2.63	4.01	3.26	.....	7.75	3.30	5.34	3.90	2.94	1.70	3.54	.....	1918
Average.....	4.98	2.00	3.42	3.46	4.57	5.90	3.12	3.35	3.24	2.83	1.28	2.88	38.07	

TABLE XII.—MONTHLY RAINFALL AT DISTRICT AND COUNTY EXPERIMENT FARMS—Inches (Concluded)

Date	January	February	March	April	May	June	July	August	September	October	November	December	Year	Date
Paulding														
1916.....	4.63	0.68	2.51	2.02	5.98	6.01	1.02	1.28	1.78	1.29	2.07	1.87	31.14	1916
1917.....	2.04	0.52	3.98	3.85	4.82	4.14	3.29	1.70	1.67	6.39	0.49	0.59	.....	1917
1918.....	.....	1.19	.....	.....	3.22	1.97	1.74	1.02	.....	2.01	2.73	4.44	.....	1918
Average.....	3.33	.80	3.24	2.93	4.67	4.04	2.02	1.33	1.72	3.23	1.76	2.30	.....
Batavia														
1916.....	6.29	2.39	4.59	1.94	3.93	4.27	1.31	4.97	2.25	2.14	1.97	3.64	39.69	1916
1917.....	4.51	1.59	3.93	3.73	4.44	3.03	4.12	1.84	2.23	3.00	0.63	1.48	34.53	1917
1918.....	5.33	0.95	2.54	2.73	3.94	5.93	1.36	5.88	2.46	3.02	2.15	4.73	41.02	1918
Average.....	5.38	1.64	3.69	2.80	4.10	4.41	2.26	4.23	2.31	2.72	1.58	3.28	38.41	

TABLE XIII.—MONTHLY MEAN TEMPERATURE AT DISTRICT AND COUNTY EXPERIMENT FARMS—Degrees (Continued)

Date	January	February	March	April	May	June	July	August	September	October	November	December	Year	Date
Marietta														
1916.....	38.6	29.7	38.4	50.6	63.8	65.9	76.5	74.6	63.4	53.7	43.1	31.8	52.5	1916
1917.....	30.6	29.8	40.7	51.7	56.0	67.3	72.8	72.2	62.5	49.2	39.3	24.0	49.7	1917
1918.....	19.1	35.2	46.4	51.4	67.7	69.4	71.0	77.4	60.2	58.1	42.4	41.4	53.3	1918
Average.....	29.4	31.6	41.8	51.2	62.5	67.5	73.4	74.7	62.0	53.7	41.6	32.4	51.8	
Canfield														
1916.....	27.0	22.6	37.3	46.1	59.7	61.8	72.8	71.2	62.6	52.4	41.3	28.8	46.2	1916
1917.....	13.4	28.5	41.0	47.2	52.3	65.9	71.6	70.0	59.4	45.6	36.2	21.0	46.2	1917
1918.....					65.0		69.4	73.4	55.6	54.0	40.7	38.0		1918
Average.....	20.2	25.5	39.1	46.6	59.0	63.8	71.3	71.5	59.2	50.7	39.4	29.3		
Mt. Healthy														
1916.....	37.8	30.0	38.7	51.4	64.8	66.4	77.6	76.0	65.6	55.8	45.6	31.8	53.5	1916
1917.....	32.0	30.8	42.8	51.5	56.6	68.5	73.0	72.8	64.6	48.2	41.9	21.7	50.4	1917
1918.....	15.6	33.6	46.6	50.5	66.4	68.6	71.0	77.0	60.4	57.5	44.0	41.4	52.7	1918
Average.....	28.5	31.5	42.7	51.1	62.6	67.8	73.9	75.3	63.5	53.8	43.8	31.6	52.2	

TABLE XIII.—MONTHLY MEAN TEMPERATURE AT DISTRICT AND COUNTY EXPERIMENT FARMS—Degrees (Concluded)

Date	January	February	March	April	May	June	July	August	September	October	November	December	Year	Date
Paulding														
1916.....	31.4	24.6	33.2	49.0	60.4	64.4	78.8	76.8	64.0	52.4	41.2	25.2	50.1	1916
1917.....	24.6	21.8	38.6	47.0	53.2	65.7	71.2	70.4	60.8	44.0	37.8	19.7	46.2	1917
1918.....	10.8	28.0	43.6	48.0	66.0	68.2	71.0	76.8	.....	54.4	41.4	37.6	.....	1918
Average.....	22.3	24.8	38.5	48.0	59.9	66.1	73.7	74.7	62.4	50.3	40.1	27.5	48.1	
Batavia														
1916.....	38.8	30.7	39.4	51.8	64.6	67.0	78.3	75.8	65.0	55.3	45.8	32.2	53.7	1916
1917.....	32.1	29.2	42.6	52.1	57.2	68.6	73.6	73.6	65.4	48.6	41.8	23.0	50.6	1917
1918.....	17.4	35.0	49.5	52.0	68.2	71.4	73.2	78.3	61.2	60.2	44.4	42.2	54.4	1918
Average.....	29.4	31.6	43.8	52.0	63.3	69.0	75.0	75.9	63.9	54.7	44.0	32.5	52.9	
Germantown														
1915.....	26.6	38.2	34.8	56.6	59.8	68.4	72.8	68.0	68.0	56.7	46.0	31.8	52.3	1915
1916.....	36.4	28.6	37.2	51.0	63.5	65.8	78.2	75.4	65.0	54.0	43.8	30.7	52.5	1916
1917.....	29.4	29.4	41.8	50.8	55.3	67.3	72.1	71.8	62.9	47.6	41.0	21.3	49.2	1917
1918.....	15.2	32.2	44.3	50.0	66.4	69.6	71.6	77.6	58.6	58.6	43.0	41.6	52.4	1918
Average.....	26.9	32.1	39.5	52.1	61.2	67.8	73.7	73.2	63.6	54.2	43.4	31.3	51.6	

TABLE XIV.—DAILY EVAPORATION (inches) AND WIND MOVEMENTS
(miles) AT THE EXPERIMENT STATION, WOOSTER,
JULY-OCTOBER, 1916

Date	July		August		September		October	
	Evaporation	Wind movement	Evaporation	Wind movement	Evaporation	Wind movement	Evaporation	Wind movement
1.....	0.021	34	0.241	47	0.200	30	0.109	27
2.....	.230	33	.175	44	.071	39	.116	60
3.....	.244	54	.214	46	.204	58	.132	34
4.....	.115	65	.245	32	.186	36	.111	29
5.....	.206	50	.154	37	.172	61	.148	41
6.....	.228	43	.192	32	.224	54	.141	36
7.....	.220	38	.249	25	.072	39	.124	43
8.....	.216	29	.278	46	.247	61	.149	28
9.....	.202	40	.132	30	.168	39	.120	54
10.....	.100	35	.240	46	.168	61	.090	104
11.....	.224	39	.169	30	.261	40	.086	38
12.....	.266	45	.162	41	.197	46	.089	32
13.....	.250	50	.267	55	.240	89	.158	78
14.....	.118	26	.216	54	.183	23	.063	98
15.....	.154	38	.222	27	.015	100	.090	30
16.....	.276	73	.175	36	.168	41	.046	83
17.....	.239	21	.194	28	.164	37	.115	97
18.....	.012	41	.198	22	.059	62	.091	68
19.....	.175	41	.207	21	.165	45	.119	125
20.....	.205	40	.178	31	.132	48	.133	80
21.....	.250	53	.218	25	.219	68	.121	202
22.....	.199	34	.216	30	.109	38	.017	67
23.....	.276	52	.269	54	.131	82	.069	44
24.....	.264	34	.177	66	.103	53	.068	23
25.....	.196	33	.222	46	.126	80	.034	29
26.....	.104	22	.147	27	.138	51	.073	107
27.....	.197	33	.187	32	.170	51	.082	54
28.....	.238	33	.306	41	.260	51	.086	61
29.....	.266	36	.194	40	.074	76	.069	35
30.....	.257	33	.162	22	.093	123	.109	60
31.....	.227	30	.191	29	.....	.....	.077	26
Total.....	6.177	1,218	6.397	1,095	4.719	1,727	3.035	1,893
Average.....	.199	39	.206	35	.157	58	.098	61

TABLE XIV.—DAILY EVAPORATION (inches) AND WIND MOVEMENTS
(miles) AT THE EXPERIMENT STATION, WOOSTER,
APRIL-OCTOBER, 1917—(Continued)

Date	April		May		June		July		August		September		October	
	Evaporation	Wind movement	Evaporation	Wind movement	Evaporation	Wind movement	Evaporation	Wind movement	Evaporation	Wind movement	Evaporation	Wind movement	Evaporation	Wind movement
1.....	.045	89	.097	163	.079	38	.230	49	.295	44	.116	28	.052	83
2.....	.095	118	.116	105	.111	60	.242	54	.286	11	.157	32	.083	42
3.....	.079	50	.152	64	.209	98	.226	43	.239	90	.124	20	.042	57
4.....	.162	124	.124	122	.169	34	.161	31	.211	29	.136	46	.086	66
5.....	.052	154	.084	97	.092	33	.232	22	.262	32	.166	24	.003	96
6.....	.032	199	.010	76	.236	57	.134	39	.242	39	.117	66	.075	56
7.....	.096	163	.016	31	.291	81	.227	45	.250	42	.020	21	.048	42
8.....	.076	151	.093	62	.152	65	.128	71	.192	58	.089	46	.077	94
9.....	.086	116	.110	84	.047	47	.179	38	.149	41	.127	31	.042	34
10.....	.092	117	.106	67	.063	67	.128	53	.142	30	.176	86	.057	49
11.....	.156	73	.146	75	.162	59	.061	30	.188	23	.112	38	.032	36
12.....	.149	113	.103	134	.179	34	.142	29	.247	27	.130	27	.039	83
13.....	.116	174	.106	126	.142	48	.072	37	.106	26	.143	35	.043	57
14.....	.036	47	.208	129	.278	73	.068	44	.167	31	.141	24	.060	71
15.....	.051	70	.178	81	.099	72	.171	44	.184	25	.121	22	.081	76
16.....	.061	36	.164	66	.110	56	.127	25	.168	22	.188	65	.108	48
17.....	.099	45	.138	56	.169	47	.146	37	.165	51	.112	29	.075	35
18.....	.074	47	.192	58	.232	36	.138	37	.170	23	.108	26	.053	97
19.....	.163	57	.291	87	.264	47	.163	33	.206	22	.073	10	.051	64
20.....	.198	82	.183	81	.240	55	.204	28	.216	22	.165	40	.052	42
21.....	.188	98	.123	75	.196	37	.232	30	.208	22	.050	48	.038	37
22.....	.024	83	.076	95	.220	47	.219	26	.055	19	.123	42	.041	30
23.....	.102	60	.168	115	.134	47	.220	21	.056	26	.120	50	.059	54
24.....	.134	101	.166	109	.134	82	.220	32	.100	50	.117	35	.079	85
25.....	.083	110	.151	81	.166	27	.184	31	.239	60	.098	25	.004	83
26.....	.097	76	.087	50	.231	45	.229	31	.196	45	.108	30	.042	90
27.....	.081	46	.109	80	.169	42	.209	52	.184	41	.093	47	.038	58
28.....	.119	56	.063	64	.143	43	.214	29	.168	29	.122	65	.044	82
29.....	.069	79	.133	143	.154	72	.252	38	.082	36	.108	30	.095	66
30.....	.041	39	.157	46	.166	31	.263	45	.083	43	.135	105	.055	70
31.....	.....	.....	.267	87	.....	.....	.313	44	.068	6	.....	.....	.053	41
Total.....	2.856	2,773	4.117	2,709	5.037	1 580	5.734	1,168	5.524	1,065	3,595	1,193	1,806	1,924
Average...	.095	92	.133	87	.168	53	.185	38	.178	34	.120	40	.058	62

TABLE XIV.—DAILY EVAPORATION (inches) AND WIND MOVEMENTS (miles) AT THE EXPERIMENT STATION, WOOSTER, APRIL-OCTOBER, 1918—Concluded

Date	April		May		June		July		August		September		October	
	Evaporation	Wind movement	Evaporation	Wind movement	Evaporation	Wind movement	Evaporation	Wind movement	Evaporation	Wind movement	Evaporation	Wind movement	Evaporation	Wind movement
1.....	.....	.....	.137	111	.151	62	.245	85	.199	35	.133	44	.003	86
2.....	.....	.....	.161	125	.163	27	.166	30	.204	44	.193	33	.077	43
3.....	.....	.....	.231	80	.169	17	.251	65	.173	27	.120	47	.096	37
4.....	.....	.....	.231	76	.183	30	.179	21	.279	45	.070	25	.089	20
5.....	.....	.....	.207	62	.161	25	.255	40	.252	39	.101	85	.104	61
6.....	.....	.....	.247	61	.141	55	.247	60	.305	36	.217	50	.183	82
7.....	.....	.....	.211	117	.263	78	.199	51	.289	32	.007	19	.062	85
8.....	.....	.....	.206	96	.167	5	.203	60	.277	62	.131	30	.073	34
9.....	.....	.....	.114	65	.226	58	.246	78	.187	52	.141	11	.077	23
10.....	.....	.....	.189	147	.183	41	.219	55	.147	29	.068	51	.071	33
11.....	.....	.....	.029	51	.193	41	.234	44	.244	30	.053	24	.075	12
12.....	.....	.....	.....	91	.270	132	.092	48	.076	30	.044	60	.066	33
13.....	.....	.....	.....	78	.170	77	.171	56	.280	37	.072	37	.094	89
14.....	.....	.....	.104	40	.168	43	.218	42	.236	53	.072	21	.109	86
15.....	.138	25	.124	30	.166	33	.219	28	.201	32	.131	24	.086	38
16.....	.105	42	.160	42	.187	35	.131	19	.238	30	.100	43	.096	44
17.....	.150	71	.186	32	.273	64	.237	43	.154	48	.076	56	.088	26
18.....	.163	103	.194	40	.251	51	.077	31	.301	76	.092	30	.116	90
19.....	.108	123	.162	52	.276	75	.229	53	.209	73	.028	19	.072	67
20.....	.096	132	.156	66	.245	56	.227	31	.219	47	.061	60	.000	75
21.....	.095	106	.098	32	.123	79	.263	29	.200	45	.082	79	.070	41
22.....	.110	140	.218	42	.088	76	.221	30	.104	22	.077	35	.064	33
23.....	.103	71	.229	60	.143	82	.132	23	.205	28	.100	26	.038	16
24.....	.128	79	.133	21	.187	20	.169	28	.213	50	.077	17	.060	50
25.....	.120	84	.135	32	.135	48	.221	35	.202	20	.169	23	.015	47
26.....	.080	116	.294	53	.107	34	.215	53	.133	20	.069	88	.019	28
27.....	.101	111	.318	50	.196	49	.196	36	.096	20	.087	60	.047	46
28.....	.226	123	.238	56	.176	59	.224	26	.119	66	.142	51	.095	26
29.....	.201	122	.200	44	.200	36	.161	41	.083	44	.138	57	.055	30
30.....	.134	62	.079	31	.270	50	.174	63	.129	34	.162	28	.023	30
31.....	.....	.....	.281	28	.....	.....	.188	60	.088	42	.....	.....	.041	126
Total.....	2.058	1,510	5.272	1,911	5.631	1,538	6.209	1,364	6.042	1,248	3.013	1,233	2.164	1,487
Average...	.129	94	.182	.62	.188	51	.200	44	.195	40	.100	41	.070	48

NOTES ON THE WEATHER AT THE EXPERIMENT STATION AT
WOOSTER, 1918

SUMMARY BY MONTHS

LATITUDE 40° 47' 01"—LONGITUDE 81° 55' 48"
ELEVATION ABOVE SEA LEVEL, 1,080 FEET

JANUARY

January 1918 was the coldest month on record at this station, the mercury registering from 1° to 19° below zero on eight different days. The mean temperature was 14.2°. This is 13° below the 31-year average. The snowfall was heavy, a total of 21 inches, some remaining on the ground the entire month.

FEBRUARY

The mean temperature for the month was 29.6°, which is above the average for February. The highest, 63°, occurred on the 14th, and the lowest, —18°, on the 5th, giving a range of 81°. The precipitation was below the average, the total for the month being 2.39 inches.

MARCH

The weather for March was much warmer than usual, the mean temperature being 43.1°. The highest recorded for the month was 76° on the 20th, 21st and 31st. The lowest was 17° on the 10th. The precipitation was 2.01 inches, which is 1.58 inches below the average for March.

APRIL

The weather for this month was cool and changeable with many cloudy and rainy days. The mean temperature was 48.6°, which is about the average for April. The highest was 78° on the 2d, and the lowest 22° on the 5th. Rain or snow fell on 14 days. The total precipitation was 2.96 inches, this being very close to the 31-year average. The total snowfall was four inches.

MAY

The mean temperature was 65°, which is 6.4° above the average for May. The highest, 89°, occurred on the 27th and 31st; the lowest, 31°, on the 2d. The rainfall was more than one inch above the average. Rain fell on 17 days.

JUNE

The mean temperature for June was 67.2°, this being also the average for the past 31 years. The highest was 89° on the 1st, and the lowest was 40° on the 24th. A moderate frost occurred on the

23d and 24th, doing considerable damage to crops on low land. The rainfall was very light, being only 1.91 inches. The average fall for June is 4.09 inches.

JULY

The mean temperature for July was below normal and the rainfall deficient. The mean temperature for the month was 70.4°. The highest was 95° on the 21st, and the lowest was 42° on the 2d, while a minimum of 52° was registered on the 31st. The total rainfall was 2.68 inches. The 31-year average for this month is 4.11 inches.

AUGUST

The mean temperature for the month was 75.1°. The highest for the month was 105° on the 6th. This also marks the highest temperature ever recorded at this Station. The lowest for the month was 45° on the 1st. The rainfall was below the average, the total fall being 3.03 inches.

SEPTEMBER

The mean temperature was 57.4°; this is the lowest mean for September recorded here since 1888. The highest temperature for the month, 81°, occurred on the 2d, and the lowest, 33°, on the 22d. A moderate frost on the 22d, doing some damage to crops on low land. The total rainfall for the month was 3.27 inches.

OCTOBER

The weather throughout the month was generally fine. The mean temperature was 55.5°, which is 4.2° above the 31-year average. The highest, 79°, was on the 2d, 5th and 6th, the lowest, 27°, on the 1st. The first real killing frost of the season occurred on this date. The rainfall was 2.82 inches.

NOVEMBER

The weather continued very fine through the greater part of November with an average temperature of 41.9°. The highest temperature was 68° on the 7th, and the lowest 19° on the 27th. The precipitation for the month was 1.43 inches, this being 1.20 inches below the average for November.

DECEMBER

The mean temperature for December, 37.8°, is far above the average, and has not been surpassed since the year 1889. The highest was 61° on the 8th, and the lowest was 20° on the 26th, 28th and 29th. The precipitation was above the average. The total for the month was 3.71 inches.